

British Columbia

Core
Field Supplements
Emergency Response Plan

Ovintiv

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H₂Safety Services Inc.

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CORE EMERGENCY RESPONSE PLAN

REVISION HISTORY

This Emergency Response Plan is effective June 26th, 2020. The company's Emergency Response Program Coordinator is responsible for updating this plan annually or as required. Any errors or omissions in the plan should be brought to their attention.

Annual ERP Update Due: June 26 th , 2021						
Date of Issue	Reason For Revision	Section	Affected Pages	Date Inserted Into ERP:		
	Converting from Encana to Ovintiv	All	All	June 26, 2020		
June 26, 2020		Introduction	Cover Page Revision History Distribution List	June 26, 2020		
2020	Annual Update (Core)	Section 1 Initial Response	Internal Notification Flowchart	June 26, 2020		
(00.0		Section 5 External Agencies	BC Notification Matrix BC Supporting Agencies Federal Agencies	June 26, 2020		
June 26, 2019	Annual Update (Core)	Introduction	Cover Page Revision History Distribution List	June 26, 2019		
		Section 5 External Agencies	BC Notification Matrix BC Lead Agencies BC Supporting Agencies Federal Agencies	June 26, 2019\		
		Section 7 Appendices	Pages 3-4	June 26, 2019		
		Introduction	Cover Page Revision History Distribution List	June 26, 2018		
June 26, 2018	Annual	Section 4 Public Protection Measures	Pages 1-2	June 26, 2018		
	Update (Core)	Section 5 External Agencies	BC Notification Matrix BC Lead Agencies BC Supporting Agencies Federal Agencies	June 26, 2018		
		Section 7 Appendices	Pages 36, 38	June 26, 2018		



CORE EMERGENCY RESPONSE PLAN

REVISION HISTORY, CONT.

Annual ERP Update Due: June 26 th , 2021							
Date of Issue	Reason For Revision	Section	Affected Pages	Date Inserted Into ERP:			
June 2017	New ERP Manual	ALL	ALL				



This Emergency Response Plan is effective July 29th, 2020. The company's Emergency Response Program Coordinator is responsible for updating this plan annually or as required. Any errors or omissions in the plan should be brought to their attention.

Annual ERP Update Due: (July 29 th , 2021)							
Date of Issue	Reason For Revision	Section	Affected Pages	Date Inserted Into ERP:	Signature		
July 2017	New ERP Manual	All	All				
August 2017	Update to EPZ calculation table	Dawson North	Page 1 Facilities	August 2017			
June 7, 2018	Addition of NCLH facility (Regular Update)	Dawson North	Entire DN site section plus map	June 7, 2018			
October 24, 2018	Annual Update	All	All	October 24, 2018			
	Added reference to hazardous products	Area Overview	Page 3				
December 5, 2018	Updated asset tables	Dawson North Dawson South Fort Nelson Kiwigana Two Island Lake	Page 15 Page 117 Page 482 Page 487 (Page Behind area specific page in each site section)	December 5, 2018			
March 21, 2019	Added additional surface developments	Dawson North Dawson South	All resident pages (behind Confidential Info Tab) Map (located at end)	March 21, 2019			
July 31, 2019	Annual Update	All	All	July 31, 2019			
July 29, 2020	Name change from Encana to Ovinitv Annual Update	All	All	July 29, 2020			



FIELD SUPPLEMENT EMERGENCY RESPONSE PLAN

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OVINTIV BRITISH COLUMBIA - ERP

Distribution List

Manual #	Туре	Res Info	Branch	Title / Agency	Name
				Corporate	
44938	Binder	Full	Calgary	Senior Emergency Response Advisor	Tanner Strangway
44939	Binder	Full	Calgary	Director EHS	Katie Anne MacInnis
44940	Binder	Full	Calgary	43rd Floor Bow Tower	EOC
44941	Binder	Full	Calgary	43rd Floor Bow Tower	Secondary EOC
44942	Binder	None	Calgary	Senior Drilling Technician	Sharron Winter
44943	Binder	None	Calgary	Drilling & Completions Spare	c/o Sharron Winter
44944	Binder	None	Grande Prairie	Rig Copy #1 (Core)	c/o Kyle Geertsen
44945	Binder	None	Grande Prairie	Rig Copy #2 (Core)	c/o Kyle Geertsen
44946	Binder	None	Grande Prairie	Rig Copy #3 (Core)	c/o Kyle Geertsen
44947	Binder	None	Grande Prairie	Rig Copy #3 (Core)	c/o Kyle Geertsen
44948	Binder	None	Grande Prairie	Rig Copy #5 (Core)	c/o Kyle Geertsen
44949	Binder	None	Grande Prairie	Completions Copy #1 (Core)	c/o Kyle Geertsen
44950	Binder	None	Grande Prairie	Completions Copy #2 (Core)	c/o Kyle Geertsen
44951	Binder	None	Grande Prairie	Completions Copy #3 (Core)	c/o Kyle Geertsen
44952	Binder	None	Grande Prairie	Completions Copy #4 (Core)	c/o Kyle Geertsen
44953	Binder	None	Grande Prairie	Completions Copy #5 (Core)	c/o Kyle Geertsen
44954	Binder	None	Grande Prairie	Lead, Operations Control Centre (OCC)	Brandon Wilson
44955	Binder	Full	Grande Prairie	Operations Control Centre (OCC)	OCC Copy
44956	Binder	Full	Grande Prairie	Incident Command Post (ICP)	ICP Copy
44957	Binder	Full	Dawson Creek	Community Relations Advisor	Adam Rolick

20 Hard Corporate Manuals

Field					
44958	Binder	None	Dawson Creek	Field Coordinator, Dawson South (Core/DS)	Brian Leslie
44959	Binder	None	Dawson Creek	09-27-79-17 W6M Compressor (Core/DS)	c/o Brian Leslie
44960	Binder	None	Dawson Creek	d-19-H / 93-P-09 Compressor (Core/DS)	c/o Brian Leslie
44961	Binder	None	Dawson Creek	01-34-78-17 W6M Compressor (Core/DS)	c/o Brian Leslie
44962	Binder	None	Dawson Creek	d-33-I / 93-P-08 Compressor (Core/DS)	c/o Brian Leslie
44963	Binder	None	Dawson Creek	a-29-H / 93-P-09 Compressor (Core/DS)	c/o Brian Leslie
44964	Binder	None	Dawson Creek	a-05-G / 93-P-09 Compressor (Core/DS)	c/o Brian Leslie
44965	Binder	None	Dawson Creek	09-15-77-15 W6M Compressor (Core/DS)	c/o Brian Leslie
44966	Binder	None	Dawson Creek	15-31-74-13 W6M Compressor (Core/DS)	c/o Brian Leslie
44967	Binder	None	Dawson Creek	South Central Liquids Hub c-41-G / 93-P-09 (Core/DS)	c/o Brian Leslie
44968	Binder	None	Dawson Creek	Field Coordinator, Tumbler Ridge (Core/DS)	Lance LaVie
44969	Binder	None	Dawson Creek	a-38-I / 93-P-01 (Core/DS)	c/o Lance LaVie
44970	Binder	None	Dawson Creek	a-62-1 / 93-P-07 (Core/DS)	c/o Lance LaVie
44971	Binder	None	Dawson Creek	b-67-H / 93-P-10 (Core/DS)	c/o Lance LaVie
44972	Binder	None	Dawson Creek	c-27-B / 93-P-08 (Core/DS)	c/o Lance LaVie
44973	Binder	None	Dawson Creek	b-100-B / 93-P-08 (Core/DS)	c/o Lance LaVie

OVINTIV BRITISH COLUMBIA - ERP

Distribution List

Manual #	Туре	Res Info	Branch	Title / Agency	Name
44974	Binder	None	Dawson Creek	c-29-A / 93-P-08 (Core/DS)	c/o Lance LaVie
44975	Binder	None	Dawson Creek	d-85-G / 93-P-07 (Core/DS)	c/o Lance LaVie
44976	Binder	None	Dawson Creek	Field Coordinator, Water Resource Hub 16-36-78-17 W6M (Core/DN)	Shawn Simmonds
44977	Binder	None	Dawson Creek	Water Resource Hub 16-36-78-17 W6M (Core/DN)	c/o Shawn Simmonds
44978	Binder	None	Dawson Creek	Field Coordinator, Sunrise Gas Plant 04-26-78-17 W6M (Core/DN)	Will Irvine
44979	Binder	None	Dawson Creek	Sunrise Gas Plant 04-26-78-17 W6M (Core/DN)	c/o Will Irvine
44980	Binder	None	Dawson Creek	15-27-79-17 W6M Gas Plant (Core/DN)	c/o Will Irvine
44981	Binder	None	Dawson Creek	North Central Liquids Hub 05-27-79-17 W6M (Core/DN)	c/o Will Irvine
44982	Binder	None	Dawson Creek	Tower Gas Plant 03-07-81-17 W6M (Core/DN)	c/o Will Irvine
44983	Binder	None	Fort Nelson	Field Coordinator (Core/FN)	Prosper Gillis
44984	Binder	None	Fort Nelson	c-67-K 94-0-8 / 94-O-8, Two Island Lake Control Room (Core/FN)	c/o Prosper Gillis
44985	Binder	None	Fort Nelson	c-93-L / 94-O-02, Kiwigana Control Room (Core/FN)	c/o Prosper Gillis

28 Hard Field Manuals

	External				
44986	Binder	Full	Fort St. John	BC Oil & Gas Commission (OGC)	Emergency Mgmt. & Safety
44987	Binder	None	Prince George	Emergency Management BC (EMBC)	Heather MacRae
44988	Digital	None	Dawson Creek	Peace River Regional District	Trish Morgan
44989	Digital	None	Fort Nelson	Northern Rockies Regional Municipality	Erin LaVale
44990	Digital	None	Fort Nelson	RCMP (Northern Rockies/Fort Nelson)	NCO In Charge
44991	Digital	None	Chetwynd	RCMP (Chetwynd)	NCO In Charge
44992	Binder	None	Tomslake	Tomslake Fire Department	George Giersch
44993	Binder	None	Calgary	Veresen - Steeprock Gas Plant	Lane Flaten
44994	Binder	None	Calgary	Veresen - Hythe Gas Plant	Darby DeSchipper
44995	Digital	None	Calgary	Pembina Pipeline Corporation	Judy Scott
44996	Binder	Full	Calgary	H ₂ Safety Services Inc.	Sean Evans

6 Hard External Manuals

5 Digital External Manuals



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Dawson North Map

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EPZ Calculations

Dawson South Map

Fort Nelson Site Section

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Section 1: Initial Response

A1 Initial Emergency Report Form

Five Step Initial Response Guide

Step 1 – Level of Emergency

Step 2 – Internal Notification

Step 3 - External Notification

Step 4 – Incident Briefing

Step 5 – Public Safety



CORE EMERGENCY RESPONSE PLAN

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A1 Initial Emergency Report Form



Core Emergency Response Plan

First On-Scene Actions

Evacuate	☐ Move upwind	area immediately. if release is downwind ind if a release is upwin	•			
	☐ Move to highe	er ground if possible.	-			
Alores	☐ Call for help (•				
Alarm		orn or whistle, or call by	radio.			
		emergencies, call 911.	es. Consider all of the ha	azards		
Assess		ation below to complete				
Protect	☐ Put on breath	ing apparatus before at	tempting rescue.			
Rescue	☐ Remove victir	n to a safe area.				
First Aid	☐ Follow the sta	andard first aid protocols	s at worksite. (CPR, etc.)			
Medical Ai	☐ Arrange trans	port of casualties to me	edical aid.			
	☐ Provide inform					
Incident De	etails To be completed by the	person involved or notified				
Report taken		Date / Time				
Name of pers	son calling		Caller Telephone			
Incident Loca	ation	(LSD / NTS	3)			
Event Summ	ary					
Agencies	☐ Yes Who?					
Notified	□ No					
Event Status	☐ Incident contained or c☐ Imminent control possi		☐ Intermittent control pos☐ Incident is uncontrolled			
Site Type	□ Well □ Pipeline	☐ Tank Farm/Storage	☐ Battery/Plant/Facility	□ Other		
lu alde est	☐ Sour Gas Release	☐ Sweet Gas Release	☐ Pipeline Break	☐ Security (theft, threat, terrorism)		
Incident Type	☐ Loss of Containment	☐ Fire/Explosion	☐ Worker Injury/Fatality	☐ Vehicle/Transportation		
	□ Liquid Spill	□ Other				

A1 Initial Emergency Report Form



Core Emergency Response Plan

Impacts										
Public Health ar	nd S	afety			□ Could	be jeopar	dized	□ Is jeopa	rdized	
Public Protection	n M	easu	res Tak	en	□ Notific	cation [l Evacuation	on ☐ Shelter-	in-place	☐ Roadblocks
Worker Injuries					□ First A	Aid □	l Hospitaliz	zed □ Fatality	□ C	Other
Distance to near	est s	urface	e develo	pment		km	Distanc	ce to nearest urba	n centre	km
Details							l .			
Release Impact			n-Lease	• □ C	off-Lease	Product_			Amou	nt
Gas Readings		H ₂ S		SO ₂	<u> </u>	LEL	0	ther	•	
Distance to near	est w	aterc	ourse			km	Weathe	er Conditions		0° 360° N
Details				•					3 N	15° NE NE
										WNW
									270° W	wsw Ese
									,	SSW SSE SE
									2	SE 135"
Media				Regu	ılator	П.У		Public	!	
Involvement?	_ \	res	□ No	Invol	vement?	□ Yes	□ No	Affairs/Commi Relations Issu		□ Yes □ No
Details										
Notes / Instruc	ction	ns Pr	ovided	 						

Distribute this completed report to all Key Response Personnel

Note: Ensure the First On-Scene Actions have been completed before proceeding to the Five Step Initial Response Guide.

First On-Scene Actions

Evacuate Alarm **Assess Protect** Rescue First Aid **Medical Aid**

Refer to A1 Initial **Emergency Report**

Step 1 - Level of Emergency

Determine Level of Emergency:

- □ Alert / Minor
- □ Level 1 Emergency
- □ Level 2 Emergency
- □ Level 3 Emergency

Use the following resources:

- Section 1: Initial Response (Level of Emergency)
- The Emergency Assessment SmartPhone App. (Search H₂Safety or Emergency Assessment in the App Store).

Note: The OGC and the AER state that the licensee must use either the Incident Classification Matrix (BC) or the Assessment Matrix for Classifying Incidents (AB) to determine the Level of Emergency. If the incident overlaps more than one level, always choose the highest level.

Step 2 - Internal Notification

- □ Follow the Internal Emergency Notification Flowchart to determine who needs to be notified.
- □ Relay the information in the completed **A1** Initial Emergency Report Form.
- □ Mobilize internal resources to the site, to the Incident Command Post (ICP), to the Corporate Emergency Operations Centre (CEOC), or place them on standby as required.

Use the following resources:

- Section 1: Initial Response (Internal Emergency Notification Flowchart)
- Section 2: Roles & Responsibilities (Response Team Phone List)
- Section 6: Forms (A1)

Refer to Ongoing Response in Section 2: Roles & Responsibilities

Note: Initial Response

takes place over a

single operational

period (optimally 8 to 12

incidents will be

resolved within the first

operational period.

hours).

. 95% of all

Reactive Phase

Step 3 - External Notification

- □ Follow the External Emergency Notification Flowchart to determine which external agencies need to be notified.
- □ 911 (police, fire, ambulance)

- □ Health Authority / Health Services
- □ Regulatory agency to confirm the Level of Emergency □ Air Monitoring (at all levels of emergency)
- □ Local Authority (Cities, Towns, Villages, Counties, M.D.s, R.D.s, R.M.s, Special Areas, Reserves, etc.)
- Use the following resources:
- Section 1: Initial Response (External Emergency Notification Flowchart)
- Section 5: External Agencies (Provincial Notification Matrix)
- Area Specific Information (White tabs)

Step 4 - Incident Briefing

Complete an ICS 201 Incident Briefing Form:

- □ Define incident details and an operational period (page 1).
- Establish the On-Site Command Post (OSCP) and ICP.
- □ Document current incident objectives, strategies and tactics (page 2).
- □ Prioritize objectives (page 2).
- □ Define initial Incident Command Structure (page 3).
- □ Identify required resources and when they'll be available (page 4).

Use the following resources:

- Section 1: Initial Response (ICS 201)
- Section 6: Forms (ICS 201)

Step 5 - Initiate Public Safety

Public Protection Measures

- □ Determine the hazard area; start with Emergency Planning Zone (EPZ) as
- □ Identify the affected surface developments and area users. (Houses, businesses, guides/outfitters, trappers, schools, other oil and gas
- □ Determine the appropriate public protection measure for the affected surface developments and area users. (Evacuation, shelter-in-place and/or
- □ Coordinate evacuation outside of the EPZ with the local authority, if
- □ Utilize broadcast media to notify public outside of the EPZ in immediate evacuation situations

Use the following resources:

- Section 1: Initial Response (Public Protection Measures Flowchart)
- Section 4: Emergency Response Procedures (Public Protection Measures)
- Area Specific Information (Map / EPZ calculation tables)

Rovers

- □ Dispatch Rovers to patrol the EPZ.
- □ Follow safety procedures and have appropriate PPE.
- Search the EPZ for transients.
- Assist residences that require evacuation assistance.
- □ Investigate surface developments that are identified as vacant or those who were unable to contact.
- □ Post notices on all outside doors of empty surface developments, vehicles,
- □ Record all contacts, communications and monitoring readings using the following forms: ICS 214, A5, B3 & B5.
- □ Monitor and record air quality readings using the following forms: ICS 214 & A5. (Smoke, plumes, wind, etc.) □ Provide status updates to the Public Safety
- H2CommandCentre Group Supervisor at established intervals; utilize H₂CommandCentre if available.

Use the following resources:

- Section 2: Roles & Responsibilities (Rovers)
- · Section 6: Forms
- Area Specific Information (Map)

Telephoners

- □ Establish a Telephoner Team to notify residents to evacuate or shelter-inplace as required.
- □ Notify special needs residents at a Level 1 Emergency and provide the option to evacuate voluntarily.
- □ Follow-up phone calls to address resident inquiries.
- □ Record all phone calls and communications using the following forms: ICS 214. B3. B6. B7. & B8.
- □ Provide status updates to the Public Safety Group Supervisor at established intervals; utilize \text{\text{\$\ext{\$\text{\$\exititt{\$\text{\$\exititt{\$\text{\$\exititt{\$\text{\$\texitt{\$\text{\$\text{\$\text{\$\text{\$\text{\$\tex{ H₂CommandCentre if available.

Use the following resources:

- Section 2: Roles & Responsibilities (Telephoners)
- · Section 6: Forms

Roadblocks

- □ Follow safety procedures to safely establish roadblocks wherever a road intersects with the EPZ and advise vehicles to reroute.
- □ Record all vehicle encounters and air monitoring readings. Complete the following forms: ICS 214, A5, B3 & B4. □ Gain permission from the Public Safety Group Supervisor for response
- vehicles to enter the hazard area. □ Provide status updates to the Public Safety Group
- Supervisor at established intervals; utilize H2CommandCentre

Use the following resources:

- Section 2: Roles & Responsibilities (Roadblocks)
- Section 6: Forms
- Area Specific Information (Map)

H₂CommandCentre if available.

Air Monitors

- □ Dispatch Air Monitoring personnel to the nearest residence / public facility downwind of the incident
- □ Follow safety procedures and have appropriate PPE.
- □ Monitor and record air quality readings using the following forms: ICS 214 & A5. (Smoke, plumes, wind, etc.)
- □ Provide status updates to the Public Safety Group Supervisor at established intervals; utilize H2CommandCentre H₂CommandCentre if available.

Use the following resources:

- Section 2: Roles & Responsibilities (Air Monitors)
- Section 6: Forms

Reception Centre Rep

- □ If residents are evacuated, dispatch a Reception Centre Representative to the reception centre location.
- □ Meet and register evacuated residents.
- □ Record contact information for those who choose to stay elsewhere. Complete the following forms: ICS 214, B1, B2 & C2.
- □ Regularly provide status updates to the Public Safety Group Supervisor (those who have arrived \text{\text{\text{\text{\text{\text{CommandCentre}}}}} H2CommandCentre and those who have not yet arrived); utilize H₂CommandCentre if available.

Use the following resources:

- Section 2: Roles & Responsibilities (Reception Centre Rep)
- · Section 6: Forms

Initial Response Guide

Step 5

Public Safety

Step 4

Incident Briefing

Step 3

Step 2

Internal Notification

Step 1 Level of Emergency

> First On-Scene Actions

External Notification

Response

Initial



Five Step



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Step 1 – Level of Emergency



Incident Classification Matrix

Instructions: Start at the top and continue down until you check off any one box in both consequence and probability to determine the incident classification. *This matrix is required as an attachment upon submission of an incident through the Online Minor Incident Reporting System.*

Table 1. Consequence Ranking

Rank	Consequence (any one of the following)
4	 □ Major on site equipment or infrastructure loss □ Major act of violence, sabotage, or terrorism which impacts permit holder assets □ Reportable liquid spill beyond site, uncontained and affecting environment □ Gas release beyond site affecting public safety
3	 □ Threats of violence, sabotage, or terrorism □ Reportable liquid spill or gas release beyond site, potentially affecting public safety, environment, or property □ HAZMAT worker exposure exceeding allowable □ Major on site equipment failure
2	 □ Major on site equipment damage □ A security breach that has potential to impact people, property or the environment □ Reportable liquid spill or gas release potentially or beyond site, not affecting public safety, environment, or property
1	 ☐ Moderate on site equipment damage ☐ A security breach that impacts oil and gas assets ☐ Reportable liquid spill or gas release on location ☐ **Occurrence of magnitude 4.0 or greater induced earthquake within 3 km of oil and gas operations or any earthquake which is felt on surface within a 3 km radius of oil and gas operations
0	□ No consequential impacts

^{**} For this consequence criteria, a probability score of 2 or higher must be used.

Table 2. Probability Ranking

Rank	Probability (any one of the following)
4	□ Uncontrolled, with control unlikely in near term
3	□ Escalation possible; under or imminent control
2	□ Escalation unlikely; controlled or likely imminent control
1	□ Escalation highly unlikely; controlled or imminent control
0	□ Will not escalate; no hazard; no monitoring required

Table 3. Incident Risk Score and Classification

Consequence _____+ Probability _____= Risk Score _____ (this must be completed)

Risk Score	Assessment Result			
Minor (1-2)	Notification Only; permit holder must notify the Commission online within 24 hours using the Form A: Minor Incident Notification Form (http://www.bcogc.ca/node/11188/download). In addition to Form A, spills must also be reported to EMBC.			
Moderate (3-4)	Level-1 Emergency; immediate notification (call EMBC)			
Major (5-6)	Level-2 Emergency; immediate notification (call EMBC)			
Serious (7-8)	Level-3 Emergency; immediate notification (call EMBC)			

					Probability		
			4	3	2	1	0
OGC Incident Classification Matrix		Uncontrolled, with control unlikely in near term	Escalation possible; under or imminent control	Escalation unlikely; controlled or likely imminent control	Escalation highly unlikely; controlled or imminent control	Will not escalate; no hazard; no monitoring required	
	4	 □ Major on site equipment or infrastructure loss □ Major act of violence, sabotage, or terrorism which impacts permit holder assets □ Reportable liquid spill beyond site, uncontained and affecting environment □ Gas release beyond site affecting public safety 	Level 3	Level 3	Level 2	Level 2	Level 1
ce	3	 ☐ Threats of violence, sabotage, or terrorism ☐ Reportable liquid spill or gas release beyond site, potentially affecting public safety, environment, or property ☐ HAZMAT worker exposure exceeding allowable ☐ Major on site equipment failure 	Level 3	Level 2	Level 2	Level 1	Level 1
Consequence	. 2	 □ Major on site equipment damage □ A security breach that has potential to impact people, property or the environment □ Reportable liquid spill or gas release potentially or beyond site, not affecting public safety, environment, or property 	Level 2	Level 2	Level 1	Level 1	Minor Notification Form
	1	 ☐ Moderate on site equipment damage ☐ A security breach that impacts oil and gas assets ☐ Reportable liquid spill or gas release on location ☐ ** Occurrence of magnitude 4.0 or greater induced earthquake within 3 km of oil and gas operations or any earthquake which is felt on surface within a 3 km radius of oil and gas operations 	Level 2	Level 1	Level 1	Minor Notification Form	Minor Notification Form
	0	☐ No consequential impacts	Level 1	Level 1	Minor Notification Form	Minor Notification Form	No Notification Required

Minor Incidents

- The permit holder must report the minor incident to the Commission within 24 hours by electronic submission through the Online Minor Incident Reporting System, opened through KERMIT.
- If the minor incident involves a leak or a spill, EMBC must also be called at 1-800-663-3456 so that a Dangerous Goods Incident Report (DGIR) number may be issued.

Level 1, 2, or 3 Emergency

• If the incident receives a score of Level 1, 2, or 3, it must be reported immediately (within 1 hour) (EMBC 1-800-663-3456).

Escalating, Downgrading or Standing-Down of Emergency

- The Commission must be notified as soon as possible of any change to the emergency status.
- The permit holder must consult with the Commission for escalating, downgrading or the standing-down of an incident.

Permit Holders Post-Incident Report

The Form D: Permit Holder Post Incident Report Form (https://www.bcogc.ca/node/5771/download) must be submitted by the permit holder to the Commission within 60 days for:

- 1. Any Level 1, 2 or 3 emergency incident: complete Part A-P; or
- 2. Any pipeline incident (including minor notification): complete Part A-U; or
- 3. Upon request by the Commission

to the Commission's incident reporting line This report and accompanying documentation can be found on the Commission's website under Emergency Response and Planning and must be emailed electronically to EMP@bcogc.ca

^{**} For this consequence criteria, a probability score of 2 or higher must be used.

Step 1 – Level of Emergency

Spill Reporting Criteria

Where the permit holder holds or maintains rights, the permit holder must report to the BC Oil and Gas Commission, all spills of materials as identified below:

- A spill or release of any amount of materials which impacts water ways
- Hydrocarbons; 100 litres where the hydrocarbon contains no toxic materials and does not impact water ways
- Produced/salt water; 200 litres where the fluid contains no toxic materials
- Fresh water; 10,000 litres
- Drilling or invert mud; 100 litres
- Sour Natural gas; 10 kg or 15 m³ by volume where operating pressure is >100 PSI
- Condensate; 100 litres
- Any fluid including hydrocarbons, drilling fluids, invert mud, effluent, emulsions, etc. which contain toxic substances; 25 litres

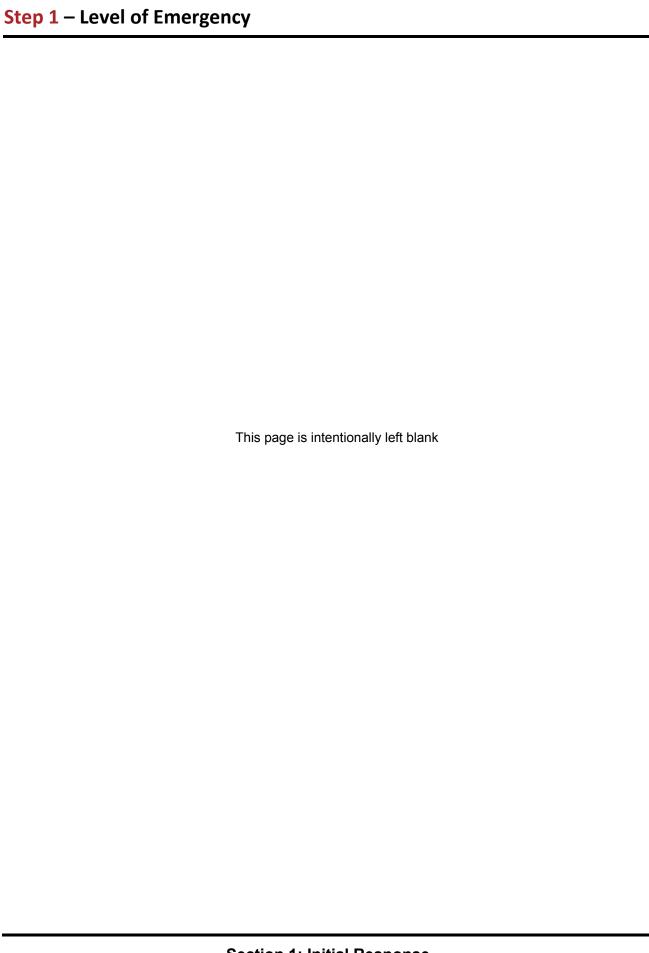
Please refer to the BC Environmental Management Act; <u>Spill Reporting Regulation</u>, Schedule "Reporting Levels for Certain Substances" for determining reportable spillage amounts of other substances:

Other Reportable Incidents

The Commission's Incident Risk Classification Matrix is designed to assist permit holders in determining which incidents must be reported. However, some incidents, which do occur, may not meet the criteria outlined in the Incident Classification Matrix but still require notification to the Commission as a minor notification. These include the following:

- Spills or release of hazardous substances which are not provincially regulated, such as radioactive substances;
- Major damage to oil and gas roads or road structures;
- Drilling kicks when any one of the following occur:
 - o pit gain of 3 m³ or greater
 - o casing pressure 85% of MA
 - 50% out of hole when kicked
 - well taking fluid (LC)
 - o associated spill
 - o general situation deterioration, i.e. leaks, equipment failure, unable to circulate, etc
- Pipeline incidents, such as spills during construction phase, exposed pipe caused by flooding, pipeline over pressure, failure (without release) of any pressure control or ESD device during operations
- Security related issues which are relatively minor; such information may be required for tracking and monitoring purposes only

Note: Refer to the Petroleum Industry Spill / Release Reporting Requirements in Section 4: Emergency Response Procedures for further spill reporting criteria and the Government Notification Matrix in Section 5: External Agencies for other reportable incidents.



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OVINTIV EH&S Risk Matrix

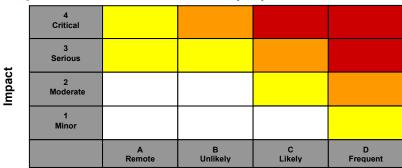
Step 1 – Impact Evaluation (Plan)

Level	People	Environment	Assets	Reputation	Financial & Business
4 Critical	Fatality Long-term health impact Permanent disability Life altering injury or illness Evacuation of a facility and community Action from landowner/activist involving weapons	Severe long-term environmental damage Wide-spread impacts to sensitive environments, wildlife and/or major bodies of water Significant off lease/site groundwater impacts	One month facility/ equipment outage Production, equipment, property, motor vehicle loss and or damage greater than \$10 million Terrorist attack/attempt	Action resulting in regulatory and/or legal prosecution or suspension of operations Prolonged national/international media attention Sustained widespread stakeholder public protest	Impact > 20% of Project/Team Budget Significant effect on Division or Corporate group deliverables
3 Serious	Short term health impact Lost time injury or illness Evacuation of facility and immediate area Violent action from landowner/activist	Severe short-term environmental damage Localized on lease groundwater impacts Significant off lease/site surface impacts	One week facility/ equipment outage Production, equipment, property, motor vehicle loss and or damage greater than \$1 million Substantial loss from theft/vandalism	Regulatory and/or legal action resulting in fines or punitive action Prolonged national/regional media attention Prolonged local/regional stakeholder public protest	Impact 10% - 20% of Project/Team Budget Significant effect on Business Unit or SBU deliverables
2 Moderate	Medical aid injury or illness Restricted work /modified duties Evacuation of job site Specific threat from landowner/activist	Moderate environmental damage No groundwater impacts Localized off lease/site surface impacts Immediate clean up	Short term (less than one week) facility/ equipment outage Production, equipment, property, motor vehicle loss and or damage greater than \$100,000 Major Property crime	Regulatory and/or legal action resulting in administrative response Brief local/regional media attention Brief local public protest	Impact 5% - 9% of Project/Team Budget Significant effect on SBU or Team deliverables
1 Minor	First Aid injury or illness Implied threat from landowner/activist	Minor environmental damage Localized on lease/site surface impacts	Negligible production loss Production, equipment, property, motor vehicle loss and/or damage less than \$100,000 Minor property crime	No regulatory action anticipated Brief or no media attention Brief or no public attention	Impact <5% of Project/Team Budget Noticeable effect on SBU or Team deliverables

Step 2 – Probability Estimation

Level	Description	Likelihood
D – Frequent	Event is expected to occur in most circumstances.	One or more occurrences per year
C – Likely	Event will probably occur at some time based on current practices	One occurrence every 1 – 5 years
B – Unlikely	Event should occur at some time based on current practices	One occurrence every 5 - 20 years
A – Remote	Event could occur at some time based on current practices.	Once in the life of the facility

Step 3 – Determine Risk Level (Do)



Probability

Impact X Probability = Risk Level

Step 4 – Risk Level (Check)

Extreme — STOP activities. Work cannot proceed until risk is reduced to a lower level.

High – Extensive risk controls/mitigation measures must be implemented and BU VP approval is required to allow work to proceed. Efforts to reduce risk to a MEDIUM or LOW level should be undertaken.

Medium – Risk controls/mitigation measures must be implemented to allow work to proceed. Efforts to reduce risk to a LOW level should be undertaken.

LOW – Some risk controls/mitigation measures may be justified. Represents an acceptable level of risk.

Step 5 – Take Action (Act)

Ensure all Risks are understood, controlled and communicated prior to starting work.

RISK ASSESSMENT WORKSHEET

(To be used in conjunction with the Ovintiv Risk Matrix)

Risk Category: What are our business objectives? Date:

Scope of the Assessment What are we addressing? (Eq. Project, BU level, Department, level etc)

Participants: Do we have the necessary

expertise present?

Period of Examination: List the time span of the risk assessment (i.e. annual, specific period etc). This has significant

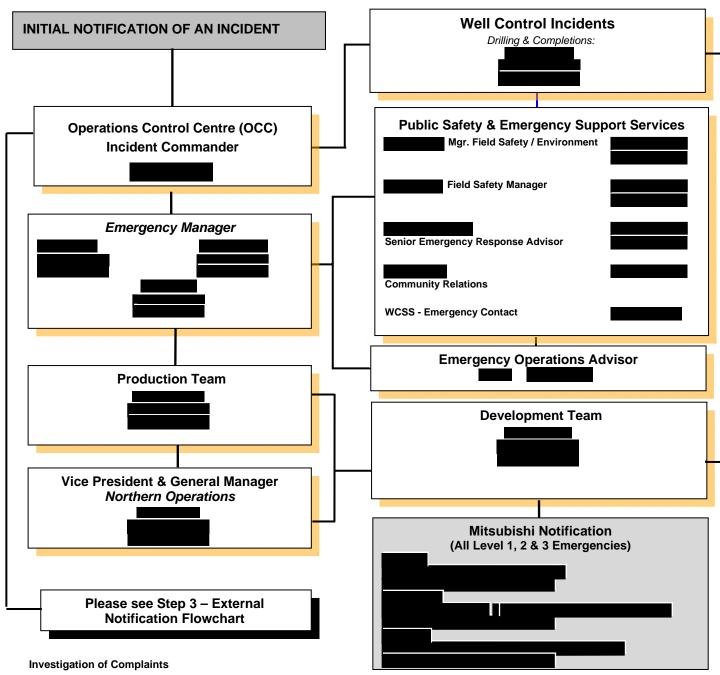
implications for consistent probability ratings.

Identify Risk Scenario	Impact Rating	Impact Reasoning	Probability Rating	Probability Reasoning	Current Mitigations and Controls	Risk Level	Risk Treatment Strategy And Mitigation Plan	Residual Risk
What could stop us from achieving our objectives? What can go wrong?	What impact does it have on what Ovintiv values? NOTE: Consider each impact category separately!	What are the specific reasons and results of the impact of the risk scenario?	What is the chance of it happening considering the current standards, work practices and business environment?	What are the specific reasons for the probability of the scenario?	What measures are currently in place?	What is the current level of risk given the existing practices? (Use Corporate Risk Matrix)	If the risk is deemed to be unacceptable what can be done about it?	What level of risk is left over and / or has the treatment strategy or mitigation plan introduced new risk(s)?



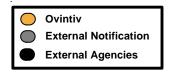
CORE EMERGENCY RESPONSE PLAN

INTERNAL EMERGENCY NOTIFICATION FLOWCHART



Company representatives will be dispatched to investigate complaints received by outside sources (member of the public, 3^{rd} party company etc.). If H_2S is suspected, personnel should be dispatched in teams of two. Any company representative who is to investigate a complaint must be trained and prepared to assume the role of Incident Commander if any of the emergency conditions are met.

Once a complaint has been investigated, the company must report the results of the investigation to the outside source who alerted the company about the situation



Note: After Initial Notifications are complete, please reference Step 4 – Incident Briefing and begin building the initial Organizational Structure (pg 3) within the ICS 201 Incident Briefing form.

STEP 2 – INTERNAL NOTIFICATION



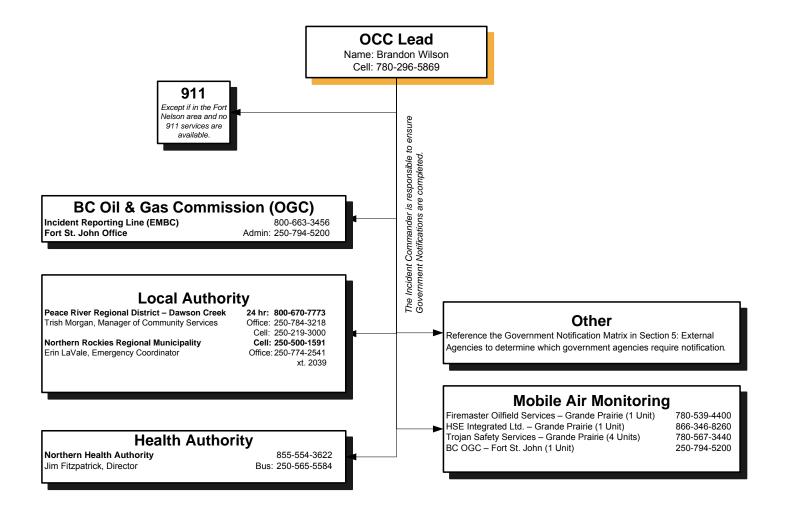
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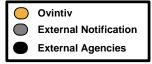


CORE EMERGENCY RESPONSE PLAN

EXTERNAL EMERGENCY NOTIFICATION FLOWCHART



Refer to Section 5: External Agencies for the Government Notification Matrix, Provincial Lead and Supporting Agencies and Federal Agencies required to be contacted or notified



Note: After Initial Notifications are complete, please reference Step 4 – Incident Briefing and begin building the initial Organizational Structure (pg 3) within the ICS 201 Incident Briefing form.

STEP 3 – EXTERNAL NOTIFICATION



CORE EMERGENCY RESPONSE PLAN

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Step 4 - Incident Briefing

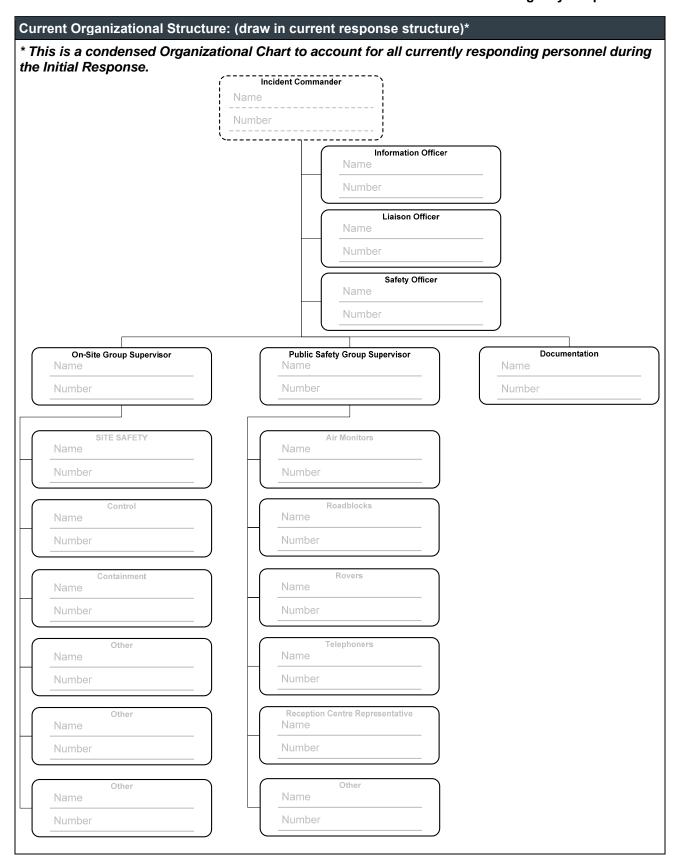


Incident Name:					
Date/Time Initiated:					
Prepared By:		ICS Po	sition:		
Level of Emergency	Alert / Minor	Level 1	Level 2	Level 3	
Map Sketch:					
Note: Maps can be dr	awn or attached here				
Situation Summary:	(Write description o	or attach A1)			
		,,			
Safety Briefing:					



Current and Planned Objectives:						
Priorities: (1) Life Safety (2) Incident Stabilization (3) Environment & Property						
1. Ensure Safety of Citizens a	and Response Personnel:	4. Minimize Economic Impacts:				
☐ 1a. Identify hazard(s) of relea	ased product.	☐ 4a. Consider tourism and local economic impacts.				
☐ 1b. Establish site control (hot security).	zone, warm zone, cold zone, &	☐ 4b. Protect public and private assets, as resources permit.				
☐ 1c. Establish an Emergency l Safety Actions.	Response Zone and Initiate Public	☐ 4c. Establish damage claims process.				
☐ 1d. Consider evacuations if n	eeded.	5. Keep Stakeholders and Public Informed of Response Activities:				
☐ 1e. Establish aircraft restriction	ons.	☐ 5a. Provide forum to obtain stakeholder input and concerns.				
☐ 1f. Monitor air in impacted are	eas	$\hfill\Box$ 5b. Provide stakeholders with details of response actions.				
1g. Develop site safety plan f briefings are conducted.	or personnel and ensure safety	$\hfill\Box$ 5c. Identify stakeholder concerns and issues, and address as practical.				
2. Control the Source of the F	Release:	☐ 5d. Provide timely safety announcements.				
☐ 2a. Complete emergency shu	utdown.	☐ 5e. Conduct regular news briefings.				
☐ 2b. Conduct firefighting.		☐ 5f. Conduct public meetings, as appropriate.				
☐ 2c. Initiate temporary repairs.						
3. Manage a Coordinated Res	sponse Effort:					
☐ 3a. Complete or confirm notif	ications.					
☐ 3b. Establish a unified comm (command post, etc.).	and organization and facilities					
 3c. Ensure mobilization and t personnel and equipment. 	racking of resources and account for					
☐ 3d. Complete documentation						
Current and Planned Acti	ons, Strategies and Tactics:					
Time:	Actions:					
HHMM						
HHMM						
HHMM						
HHMM						
HHMM						
HHMM						
HHMM						
HHMM						
HHMM						





Note: Refer to ICS 207 Incident Organization Chart in Section 6: Forms (Blue Tab) for full command structure.



Resources Summary:						
Resource(s)	Time Called	ETA	On-Site	Notes (Location/Assignment/Status)		
External Notifications: (Government)						
Agency	Time Called			Notes		

Step 4 - Incident Briefing



Site Safety and Hazard Control Analysis								
Si	te Control							
1.	Is Site Control set-up? ☐ Yes ☐ No	2. Is there an On-Scene Command Post? ☐ Yes ☐ No If so, where?						
3.	Have all personnel been accounted for? ☐ Yes ☐ No ☐ Don't Know	Injuries: Fatalities: Unaccounted: Trapped:						
4.	Are observers involved or rescue attempts planned? Observers: □ Yes □ No Rescuers: □ Yes □ No	5. Are Decon areas setup? ☐ Yes ☐ No If so, where?						
Ha	azard Identification, immediate signs of: (if yes,	explain in remarks)						
1.	Electrical line(s) down or overhead? \square Yes \square No	2. Unidentified liquid or solid products visible? ☐ Yes ☐ No						
3.	Wind direction across incident: $\ \square$ Towards your position Wind Speed: $\ \square$ Away from your position	4. Is a safe approach possible? ☐ Yes ☐ No						
5.	Odours or smells? ☐ Yes ☐ No	6. Vapours visible? ☐ Yes ☐ No						
7.	Holes, ditches, fast water, cliffs, etc. nearby? ☐ Yes ☐ No	8. Fire, sparks, sources of ignition nearby? ☐ Yes ☐ No						
9.	Is local traffic a potential problem? ☐ Yes ☐ No	10. Product placards, colour codes visible? ☐ Yes ☐ No						
11.	Other Hazards? ☐ Yes ☐ No	12. As you approach the scene from the upwind side, do you note a change in the status of any of the above? ☐ Yes ☐ No						
13.	Remarks:							
Ha	azard Mitigation: have you determined the neces	sity for any of the following?						
Entry Objectives:								
2.	Warning sign(s), barriers, colour codes in place? ☐ Yes	s □ No						
3.	Hazardous material being monitored?							
	3e. Personal exposure monitoring:							
4.	Protective gear / level: 4b. Respirators 4d. Boots:	4a. Gloves:4c. Clothing:4e. Chemical cartridge change frequency:						
5.	Decon 5a. Instructions: 5b. Decon equipment and materials:							
6.	Emergency escape route established? $\ \square$ Yes $\ \square$ No Route?							
7.	Field responders briefed on hazards? $\ \square$ Yes $\ \square$ No							
8.	Remarks:							
Pro	Protective Zones: record initial control perimeters (see Figure 1)							

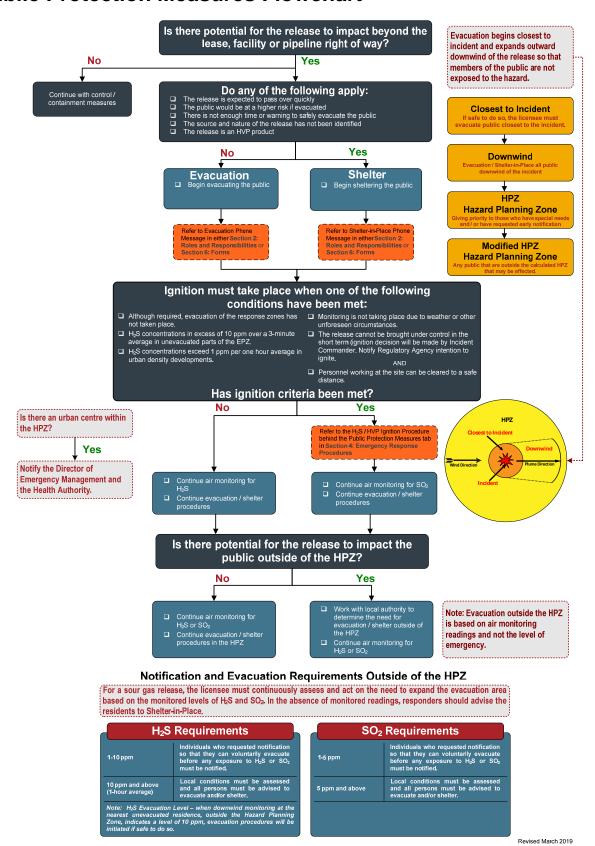


Evacuation Route Decontamination Station Staging Area Command Post WARM ZONE COLD ZONE Figure 1 Protective Zones	1. Is there a Hot Zone established? ☐ Yes ☐ No If so, Where? 2. Is there a Warm Zone established? ☐ Yes ☐ No If so, Where? 3. Is there a Cold Zone established? ☐ Yes ☐ No If so, Where? 4. Remarks: (Include any information on evacuation route, etc.)
5. Include any site sketches or photos of the protective zones (if available):	



Core Emergency Response Plan

Public Protection Measures Flowchart





Core Emergency Response Plan

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Section 2: Roles and Responsibilities

FIELD RESPONSE TEAM

KEY RESPONSE PERSONNEL

GENERAL SAFETY EQUIPMENT AND RESOURCE LISTS

KEY RESPONSE PERSONNEL

COMMAND STAFF ROLES & RESPONSIBILITIES

KEY RESPONSE PERSONNEL, CONTINUED

COMMAND STAFF ROLES & RESPONSIBILITIES, CONTINUED

FIELD RESPONSE TEAM - COMMAND STAFF

COMMAND STAFF ROLES CHART

FIELD RESPONSE TEAM - GENERAL STAFF

OPERATIONS SECTION ROLES CHART
PLANNING SECTION ROLES CHART
LOGISTICS SECTION ROLES CHART
FINANCE / ADMIN SECTION ROLES CHART

FIELD RESPONSE TEAM - PUBLIC SAFETY

PUBLIC SAFETY ROLES CHART
AIR MONITORS MODULE
RECEPTION CENTRE REP MODULE
ROADBLOCKS MODULE
ROVERS MODULE
TELEPHONERS MODULE

ONGOING RESPONSE

PLANNING "P"
5 STEP ONGOING RESPONSE GUIDE
OBJECTIVES MEETING
TACTICS MEETING
PLANNING MEETING
OPERATIONS BRIEFING

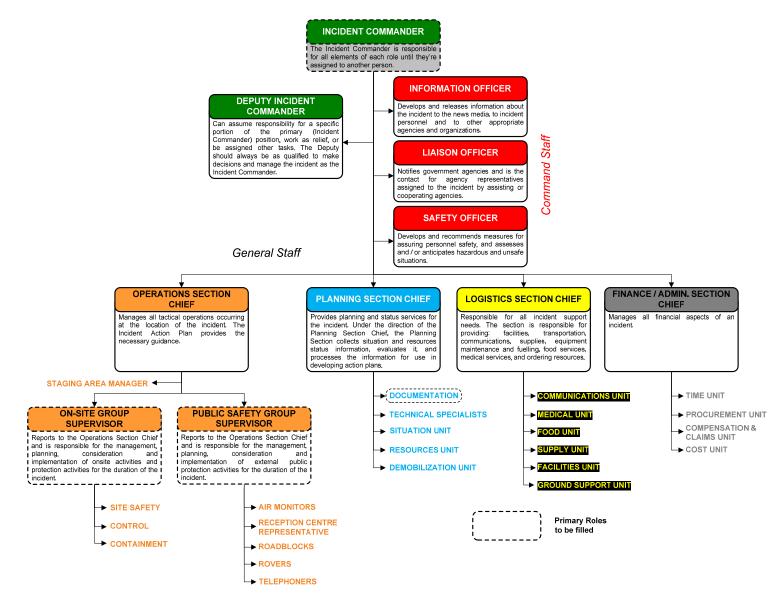


CORE EMERGENCY RESPONSE PLAN

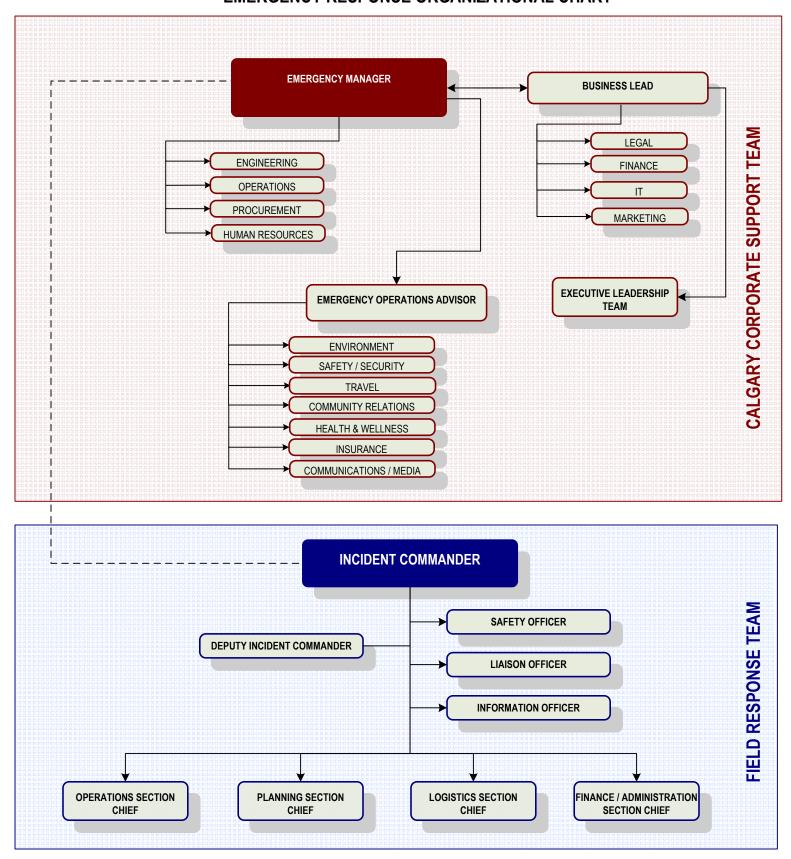
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FIELD RESPONSE TEAM



EMERGENCY RESPONSE ORGANIZATIONAL CHART



Legend

____ Communication

Command

^{*} The detailed role descriptions for the Field Response Team can be found in the applicable field ERPs located at Ovintiv's Calgary Office.



CORE EMERGENCY RESPONSE PLAN

KEY RESPONSE PERSONNEL

The following individuals are *likely* to fill the key response roles identified:

COMMAND STAFF	Incident Commander	OCC Lead Drilling Superintendent (Back Up Incident Commander)
ON-SITE	On-Site Group Supervisor	Lead Field Operators Please see the RESPONSE TEAMS PHONE LIST (yellow tab) or AREA SPECIFIC INFORMATION (white tabs) for a list of Lead Operators.
	Trained in Ignition (H ₂ S & HVP)	Emergency Manager Operations Chief / Incident Commander
Public Safety C	Public Safety Group Supervisor	Public Protection Chief Lead Field Operators
PUBLIC SAFETY	Air Monitors / Roadblock / Rovers	Field Operators Please see the RESPONSE TEAMS PHONE LIST (yellow tab) or AREA SPECIFIC INFORMATION (white tabs) for a list of Area Operators.
I OBLIC SALLTI	Telephoners	Operations Technician
	Reception Centre Representative	Community Relations Advisor Please see the RESPONSE TEAMS PHONE LIST (yellow tab) or AREA SPECIFIC INFORMATION (white tabs) for a list of Area Operators.

Please refer to the AREA SPECIFIC INFORMATION (white tabs) for the full list of personnel and their contact information.

GENERAL SAFETY EQUIPMENT AND RESOURCE LISTS

Operator, Truck & Other Safety Equipment

Each operator is required to drive a suitable vehicle (4x4 truck) for their service areas and should carry the following equipment: 20-30lb fire extinguisher, vehicle emergency roadside kit, cell phone and a 4 head monitor.

Refer to AREA SPECIFIC INFORMATION SECTION (white tabs) for further details on specific air monitoring equipment, back-up communication methods, ignition and roadblock kit contents as well as their locations, specialty fire-fighting equipment and/or service companies and their contact information for if the aforementioned equipment is not available.



CORE EMERGENCY RESPONSE PLAN

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KEY RESPONSE PERSONNEL

COMMAND STAFF ROLES & RESPONSIBILITIES

EMERGENCY MANAGER

Provides Corporate support with resources and business decisions

Level 1 Emergency

- DOCUMENT all activities on Time and Event Log
- Establish communications with Emergency Operations Advisor and Business Lead to discuss safety and technical support requirements
- Provide assistance with regulatory agency notifications if requested

Level 2 & 3 Emergency

- DOCUMENT all activities
- Monitor all phases of the emergency control operations
- Liaison with the Incident Commander regarding Ignition
- Direct the Incident Commander to implement Ignition immediately the Ignition Criteria are met
- Notify and maintain contact with appropriate government agencies' head or supplemental offices
- Update Emergency Operations Advisor and Business Lead and ensure technical, operational and business decision support is provided
- Ensure that the Senior Management Team is advised of the situation by the Business Lead
- Coordinate field level media support
- Update the Emergency Operations Advisor and Business Lead, who will activate the Senior Management Team if not already initiated, and provide additional technical, operational and media support
- Update and maintain contact with the appropriate government agencies
- Note: for a Level 1 Emergency, the Emergency Manager or the Incident Commander, in consultation
 with the OGC are the only Ovintiv representatives with the authority to terminate an emergency.
- For a Level 2 or 3 Emergency, only the Emergency Manager, in consultation with the OGC and the local and/or provincial disaster service authorities, has the authority to terminate an emergency.



CORE EMERGENCY RESPONSE PLAN

KEY RESPONSE PERSONNEL, CONTINUED

COMMAND STAFF ROLES & RESPONSIBILITIES, CONTINUED

EMERGENCY OPERATIONS ADVISOR (On Call Position)

Provides Corporate support with resources and business decisions

Level 1 Emergency

- DOCUMENT all activities on Time and Event Log
- Establish communications with Emergency Manager and Incident Commander
- Make the Incident Commander aware of services and expertise available to assist

Level 2 & 3 Emergency

- DOCUMENT all activities
- Identify government and other agencies related to the incident, and ensure that notifications are done, and maintained
- Provide specialized resources and technical expertise in the areas of environment, media, community relations, and insurance
- Identify affected contractors, and confirm whether the contractors' head office(s) have been notified
- Coordinate meetings between government agencies and Company personnel as required
- Notify corporate level of environment, community relations, insurance, etc. and advise of the situation
- Ensure all documentation is being collected at all response levelskey response personNel, continued

BUSINESS LEAD

Level 1, 2 & 3 Emergency

- DOCUMENT all activities on Time and Event Log
- If a level of emergency is skipped, ensure procedures for a lower level emergency have been completed
- Advise and update the Senior Management Team if any of the crisis notification criteria are met
- Reassign resources within the business unit, (e.g., financial, physical, technical) to support the response
- Assess Corporate exposure and participate in strategic planning
- Redirect all media inquiries to the Media Spokesperson

Post-Incident

- Notify the Senior Management Team of the emergency call down status
- Instruct any business unit responders to forward their related documentation to the Emergency Operations Advisor in preparation of the Post-Incident reporting

Command Staff Roles Incident Commander Deputy Incident Commander Information Officer Liaison Officer Safety Officer The Incident Commander is in charge of overall management of the incident and must be fully qualified to manage the incident. The **Deputy Incident Commander** may assume The Information Officer is responsible The Liaison Officer is responsible for The Safety Officer develops and recommends measures for assuring As incidents grow in size or complexity, a more highly qualified Incident Commander may be assigned by the company. responsibility for a specific portion of the primary for developing and releasing notifying government agencies and is information about the incident to the the contact for agency representatives personnel safety, and assesses and / position, work as relief, or be assigned other Note: The highest ranking authority arriving at the site of the incident (first on-scene) becomes the Incident Commander and tasks. The **Deputy** should always be as qualified news media, to incident personnel and assigned to the incident by assisting or or anticipates hazardous and unsafe establishes command and control. The first on-scene will remain the Incident Commander until there is formal transfer of to make decisions and manage the incident as the to other appropriate agencies and cooperating agencies. command to a more senior company employee and / or qualified personnel. ncident Commander organizations. Initial Response - *Refer to the 5 Step Initial Response Guide in Section 1: Initial Response* ☐ Ensure the site is evacuated if ☐ If no scribe has been assigned to the □ Receive incident briefing from □ Complete Regulatory А3 **Incident Commander**, support the the Incident Commander First Call unsafe. Step 1: Level of Emergency **Incident Commander** by documenting before contacting external Communication Form. ☐ Initiate rescue plans if safe to do ☐ If necessary, investigate and confirm the emergency. If the incident involves a release of sour product, the investigation should details of the emergency, focusing on agencies. □ Refer to Section 5: External be conducted in teams of two. Take appropriate safety precautions (PPE, SCBA, etc.). Ensure personal safety at all times. activities and decisions made. Prepare regular status updates Agencies for the Government □ Review the Incident Action Plan Determine the Level of Emergency using the OGC Incident Classification Matrix for BC or AER's Assessment Matrix for that will be provided to internal ■ Record, update and maintain a Notification Matrix. Notify as Classifying Incidents for all other provinces (e.g. Alert/Minor, Level 1, 2, 3) found in Section 1: Initial Response or using the to identify and correct any Emergency Assessment SmartPhone App. (Search H₂Safety or Emergency Assessment in the App Store). chronological summary of the incident company personnel to keep soon as possible and provide potential occupational and them apprised of the situation. status updates at agreed upon health hazards. Step 2: Internal Notification ☐ Identify and document any intervals to: ■ Names of personnel in each assigned ☐ Follow the Internal Emergency Notification Flowchart outlined in Section 1: Initial Response to contact required field resources. Refer to ☐ Ensure work / rest guidelines media involvement that has the Section 2: Roles and Responsibilities / Response Team Phone List. Relay the information from the A1 Initial Notification Form. position and their location Government regulator are followed. already taken place Mobilize internal resources to the site, to the Incident Command Post (ICP) or place them on standby as required. ■ Local authorities (counties. □ Control and containment measures Continuously monitor workers ☐ If the media statement hasn't Contact required company resources and communicate the level of emergency. Refer to Section 2: Roles and Responsibilities / cities, towns, MDs, RDs, ■ Environmental monitoring information for exposure to ensure they are yet been prepared ensure that Response Team Phone List. First Nations Reserves, etc.) wearing the required PPE. ☐ Injuries / deaths / missing persons the generic media statement **Step 3: External Notification** ☐ Health authority ☐ Take appropriate action to from the ERP is communicated Phone calls ☐ Follow the External Emergency Notification Flowchart in Section 1: Initial Response for communication structure and the Provincial mitigate or eliminate unsafe and being used in the field. Environment Notification Matrix in Section 5: External Agencies to determine which external agencies need to be notified. Reference Section 5: Actions and decisions conditions, operations, or ■ Assist head office with the □ Provincial emergency External Agencies and the Area Specific Information for the location of the incident. ☐ Status of the public protection actions hazards. preparation of a management organization Step 4: Incident Briefing ■ Manage the flow of traffic to and ☐ Immediately stop any unsafe preliminary media Other agencies ☐ The following positions are always filled regardless of the size of the incident: Incident Commander, On-Site Group Supervisor and communication with the Incident C1 statement if required practices. ■ Keep track of all government Commander so that he can focus on using the Preliminary Conduct a general inspection of Assess the situation, identify the incident source, and consider how to stop the source. Carry out a site assessment that includes the correspondence using managing the incident. Media Statement form. the facilities, food services and following: identify hazardous materials, evaluate risk to workers and the public, determine the potential for the incident to escalate, the Government СЗ Conduct status update meetings. Document all sanitation services soon after identify safety concerns, determine which other company's facilities are involved. Agency Contact Log. Form ICS 201 communications with they become operational and Provide status to head office. Detail and prioritize the objectives for the next operational period taking into consideration the priorities of (1) Life Safety, (2) C2 Obtain cooperating and the media using the follow up on a periodic basis Incident Stabilization. (3) Property & Environment using the ICS 201 Incident Briefing Form. Deal with some day-to-day decision assisting agency information Media Contact Log. throughout the incident for Assign other positions as required to meet the identified objectives. Review and complete the ICS 207 Incident Organization Form ICS 207 making. that includes: contact compliance to all health and Develop a detailed media Chart in Section 6: Forms. Depending on the scale of emergency, all positions may not be assigned. The Incident Assume duties of the Incident information, radio frequencies, safety standards. Provide a strategy for the incident. Commander assumes responsibility for all unassigned roles until personnel have been assigned to them. Commander, if required. cooperative agreements. report of deficiencies. Conduct a role review with each of the positions above to ensure they clearly understand their roles and responsibilities. Designate and prepare media equipment type, number of Maintain communication with the Incident Document both safe and unsafe briefing rooms away from the Develop detailed plans of action (strategies) to achieve the objectives and determine what tactics and resources are required to personnel, condition of Commander. acts, corrective actions taken on Incident Command Post. implement the strategies (oil spill services, safety services, etc.). equipment and personnel, the scene, accidents or injuries, Organize tours and photo Activate the Incident Command Post (ICP). Refer to the Appendices for Incident Command Post activation guidelines. agency constraints, etc. and ways to improve safety on opportunities if required. **Important** ☐ Ensure the Planning Section posts and updates the status board with incident details. □ Conduct appropriate periodic future incidents. Prior to beginning any activities, each Step 5: Public Safety Maintain communication with briefings to keep agencies person in a role must: ☐ Investigate accidents that have the Incident Commander. informed of planning actions. Determine the size of the Emergency Planning and Response Zones around the incident. Refer to the EPZ calculation tables and map ☐ Obtain a completed ICS 201 Incident occurred within the incident in Area Specific Information. □ Coordinate with any Briefing and ICS 207 Incident ■ Media releases must be Use the Public Protection Measures Flowchart located in Section 1: Initial Response to assist with determining if evacuation / shelter / Organization Chart from the Incident government agency coordinated with applicable ☐ Identify "Hot Zone" and declare ignition are required. representatives attending the regulatory agency. when responders may enter it. ☐ Ensure the affected public are contacted and advised to shelter or evacuate as required. Throughout the duration of the incident, ICP or REOC. ☐ Ensure that responders inside each person in a role must: □ If necessary, coordinate with ☐ Establish Air Monitoring, Reception Centre Representatives, Roadblocks, Rovers, and Telephoners as required. Coordinate with mutual aid the "Hot Zone" are accounted and use broadcast media to ☐ Chronologically document all actions, Ongoing Response - *Refer to the Five Step Ongoing Response Guide in Section 2: Ongoing Response* groups. for and initiate search if notify residents in the hazard decisions, contacts and requests on an ☐ Establish a method to track responders and resources to ensure they are accounted for at all times. ICS 214 Activity Log. Copies can be required. area. found in Section 6: Forms. ☐ Monitor implementation of IAP and revise as the situation dictates. Prepare for next operational period. ☐ Prepare a site-specific health ■ Work with Communications / After the incident is over, each person in a Support the Operations Section Chief in the preparation of an incident control and containment action plan. and safety plan. Media to develop a role must ☐ Ensure each section chief has adequate staff, is not violating span of control and clearly understands the roles and responsibilities. communications plan that □ Assist with post-incident activities. ☐ Conduct frequent Command Staff and General Staff meetings. includes establishing protocols All forms referenced can be found in ☐ If transfer of command occurs, an incident status briefing must take place. Provide all documentation and review situation status, for responders and all company Section 6: Forms objectives and priorities, current organization and resources, facilities, communications plan, concerns and introductions to staff. personnel as required to ensure As the emergency is brought under control, the decision to downgrade the level and/or stand down the emergency will be based on air incident information remains monitoring readings in consultation with the **Incident Commander** and the applicable government regulator. confidential (i.e. restriction on cell phone usage for ☐ The Demobilization Unit will develop and implement objectives/strategies for demobilization photography, social media, speaking to the media, etc.) All team members are located at the Incident Command Post (ICP), unless otherwise noted. Revised October 201

			General Sta	iff Roles – Ope	rations Section
Operations Section Chief	On-Site Group Supervisor	Staging Area Manager	Site safety	Control	Containment
The Operations Section Chief is responsible for managing all tactical operations occurring at the location of the incident. The Incident Action Plan provides the necessary guidance. The need to expand the Operations Section is generally dictated by the number of tactical resources involved and is influenced by span of control considerations.	On-Site Group Supervisor is responsible for coordinating all activities of Control, Containment and Site Safety at the scene of the emergency / incident.	The Staging Area Manager is responsible for managing all activities within a Staging Area.	Site Safety is responsible for responder safety and safety advice at all times at the scene of the emergency / incident.	Control is responsible for implementing measures designed to bring the incident under control or stop the incident.	Containment is responsible for implementing measures designed to reduce the impact of the incident on and prevent the spread of the incident to the surrounding areas.
 Identify and confirm communication links. Ensure the On-Site Command Post (OSCP) is established. Manage the following positions, as required: On-Site Group Supervisor, Public Safety Group Supervisor. In conjunction with the Incident Commander, the Planning Section Chief, and the Public Safety Group Supervisor, develop and implement an Incident Action Plan (IAP) Ensure responder safety at all times. Oversee control / containment procedures; ensure the hazard is isolated. Determine the current and potential environmental impact of product released, response activities, or waste disposal. Ensure that all environmental laws and regulations are complied with during emergency response operations. Provide technical advice to Incident Commander to determine public protection measures. Assess the requirements for on-site safety supervision, personnel, equipment, and other contract services. Coordinate with Logistics to obtain equipment and resources. Assist the On-Site Group Supervisor in 	 Ensure all personnel are accounted for. Release nonessential personnel from the site Oversee and maintain control of all on-site personnel. Establish On-Site Command Post (OSCP). Obtain incident briefing and environmental impact information. Coordinate activities of Staging Area Manager, Site Safety, Control and Containment. Report air monitoring to Incident Commander (third party and regulatory). Call police, fire and ambulance as needed. Coordinate with ambulance / fire / RCMP / regulatory agencies / spill co-ops. Conduct meetings with on-site personnel to review action plans, communication and safety. Request additional resources needed to implement on-site response actions. Supervise the execution of the on-site response actions. The On-Site Group Supervisor has the authority to ignite the release if ignition criteria are met. If at all possible, the On-Site Group Supervisor must consult with higher authority individuals within the company (ideally the Operations Section 	 □ Establish a staging area near the incident site and outside of the EPZ. When choosing a site for the staging area ensure the following conditions are met: □ Adequate sized site that is stable and level with suitable access roads □ No entry problems such as narrow approach ways, gates, power lines, buried pipelines, etc. □ Approval has been received from landowner □ Reception of communication equipment is adequate □ Erect staging area information and directional signs to the staging area, if required. □ Flag the perimeter of the staging area. □ Obtain an office trailer and emergency lighting, if required. □ Coordinate traffic and maintain a log of personnel and services dispatched to, or arriving from the site of the emergency. Communicate this information to the Logistics Section Chief. □ Respond to Operations Section Chief or Incident Commander requests for resources. □ Confirm all workers have required training before they are dispatched to the incident. 	 Assess hazards & potential risks e.g. fire/explosion, toxicity, oxygen deficiency, ignition sources, access/egress. Ensure responder safety at all times. Ensure that on-site personnel are taking appropriate safety actions: PPE, SCBA / SABA, Safe Work Procedures, proper grounding / bonding procedures, work in teams, etc. Ensure workers that show signs of stress, fatigue, and other symptoms are demobilized and sent for treatment if necessary. Maintain records of all injuries and onsite medical treatments. Conduct responder safety orientations. Monitor activities and conduct a head count on a regular basis. Continually evaluate risks and stop unsafe activities immediately. Recommend alternatives for activities that are considered to be unsafe. 	 □ Assist with the development of control procedures. □ Identify immediate response tactics (i.e. offensive / defensive response tactics). Only when safety is assured, take immediate operational actions to bring the incident under control (i.e. shut down, isolate, de-pressure, etc.). □ Provide or seek technical / engineering advice around all control-related issues. □ Inform Operations Section Chief of any interactions with regulatory agencies or environmental personnel. 	 Assist with the development of containment procedures. Identify immediate response tactics (i.e. offensive / defensive response tactics). Only when safety is assured, take actions to contain the incident so as to prevent the incident from spreading offsite and to reduce the impact on the public, sensitive terrain, watercourses, etc. Provide or seek technical / engineering advice around all containment-related issues. Secure the scene and restrict access to essential and authorized personnel only. Inform Operations Section Chief of any interactions with regulatory agencies or environmental personnel. Coordinate oil spill cooperative activities (booms, dams, etc.).
determining whether ignition is appropriate. If at all possible, input is to be obtained from the Incident Commander and the applicable government regulator. Maintain continuous communications with the Incident Commander.	Chief, Incident Commander, etc.) and the applicable government regulator before making the decision to ignite a release. Refer to Section 4: Emergency Response Procedures.	 Maintain and provide status to the Planning Section of all resources in Staging Area. Demobilize or move Staging Area as required. 		Prior to beginning any activities, each person in ☐ Obtain a completed ICS 201 Incident Briefin Incident Commander. Throughout the duration of the incident, each pure Chronologically document all actions, decise Copies can be found in Section 6: Forms. After the incident is over, each person in a role ☐ Assist with post-incident activities.	ng and ICS 207 Incident Organization Chart from the person in a role must: sions, contacts and requests on an ICS 214 Activity Log.
					Revised October 2018
Located at the Incident Command Post (ICP)	Located at the On-Site Command Post (OSCP)	Located at the Staging Area	Located at the On-Site Command Post	Located at the On-Site Command Post (OSCP)	Located at the On-Site Command Post (OSCP)

Escalate, Downgrade or Stand-Down Levels of Emergency: As the emergency is brought under control, the decision to downgrade the level and/or stand down the emergency will be based on air monitoring readings in consultation with the Incident Commander and the applicable government regulator. All affected persons and the media must be kept informed of the status of an emergency. Emergency Follow-up: Once the emergency is over, the area residents, transients, industrial users, involved government agencies, and any individual notified will be informed of the stand-down by the Information Officer or Public Safety Group Supervisor.

General Staff Roles – Planning Section

Planning Section Chief	Documentation Unit	Technical Specialists Unit	Situation Unit	Resources Unit	Demobilization Unit	
The Planning Section Chief is responsible for providing planning and status services for the incident. Under the direction of the Planning Section Chief, the Planning Section collects situation and resources status information, evaluates it, and processes the information for use in developing action plans. Dissemination of information can be in the form of the Incident Action Plan, formal briefings, or through map and status board displays.	The Documentation Unit is responsible for the maintenance of accurate, up-to-date incident files. Duplication services will also be provided by the Documentation Unit.	Certain incidents or events may require the use of Technical Specialists who have specialized knowledge and expertise. Technical Specialists may function within the Planning Section, or be assigned wherever their services are required.	The collection, processing, and organization of all incident information. The Situation Unit may prepare future projections of incident growth, maps, and intelligence information.	The Resources Unit is responsible for maintaining the status of all assigned resources at an incident.	The Demobilization Unit is responsible for developing the Incident Demobilization Plan.	
 Identify and confirm communication links. Assign personnel to assume the following positions, as required: Documentation, Technical, Situation, Resources, and Demobilization. Assist with setup of the Incident Command Post. Review the details of the incident and support the Incident Commander with the development of a preliminary response strategy. Identify the need for technical specialists. Collect and analyze information on the current situation, prepare situation displays and situation summaries, and develop maps and projections. Establish special information collection activities as necessary, e.g., weather, environmental, toxics, etc. Provide technical support to the Incident Commander and work with Incident Commander to develop the Incident Action Plan (IAP). 	Document the Incident Action Plan (IAP) strategies using the ICS 201 Incident Briefing Form provided in Section 1: Initial Response or Section 6: Forms and disseminate them to all key responders. Be prepared to document the Incident Commander's status update meetings using whiteboards, PC or Action Logs. Ensure consistent documentation. Ensure timely dissemination of all documentation. Participate in planning meetings, capturing key information, decisions made, commitments and status. Collect documentation from response team members and maintain a consistent system for organizing the data. Records must be held for a minimum of 5 years as it may be requested by the regulatory agency	 Determine what technical support is available now and in the future. Work with Logistics to determine the key locations for the required technical support and appropriate time to acquire. Gather data (weather, etc.) and forecast changes considering incident potential and develop new or modified response strategies. As required, obtain plume dispersion modelling. 	 Collect and evaluate information to establish an accurate picture of the situation and creates a detailed summary. Use this information to create maps and projections. Prepare, post, or disseminate resources and situation status information as required, including special requests. Provide photographic services and maps if required. 	 Monitor the status and location of all incident resources / personnel responding to the incident. Oversee the check-in of all resources. Maintenance of a master list of all resources, e.g., key supervisory personnel, primary and support resources, etc. May assist in preparing the written Incident Action Plan. Maintain and post the current status and location of all resources. 	 Prepare plan for the demobilization of all personnel and equipment upon resolution of the incident. Ensure resources in available status are still required. Identify surplus resources and probably release time. Debrief non-required resources and dismiss resources being demobilized. Coordinate demobilization with agency representatives. Develop incident check-out function for all units. Ensure the demobilization process is organized, safe and cost effective. 	
 Review any changes to the Incident Action Plan (IAP) to ensure consistency. Assemble information on alternative strategies. 	at any point during that time. □ Establish duplication services.			Form Form Form Form Form ICS ICS ICS ICS ICS 203 204 207 211 214	Form CCS CS 214 C21	
 Coordinate with Logistics to determine current available resources and resource availability for future plans of action. Establish reporting sc hedules. Conduct long-range and / or contingency planning. Develop plans for demobilization. Maintain continuous communications with 	 Incident files will be stored for legal, analytical, and historical purposes. Post and maintain all Emergency Status Boards and other laminated charts in the Incident Command Post. 			Prior to beginning any activities, each person in a real Obtain a completed ICS 201 Incident Briefing an Incident Commander. Throughout the duration of the incident, each personal Chronologically document all actions, decisions Copies can be found in Section 6: Forms. After the incident is over, each person in a role must	ortant ole must: nd ICS 207 Incident Organization Chart from the on in a role must: , contacts and requests on an ICS 214 Activity Log.	
the Incident Commander. Form Form Form Form ICS	Form Form Form Form ICS ICS ICS 231 233		Form CS CS CO CS	 Assist with post-incident activities. All forms referenced can 	be found in Section 6: Forms	

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Revised October 2018

General Staff Roles – Logistics Section Logistics Section Chief Communications Unit Medical unit Food Unit Supply Unit Facilities Unit Ground Support Unit All incident support needs are provided The Communications Unit is The **Medical Unit** is responsible for all Responsible for supplying the food | The Supply Unit is responsible The Facilities Unit is responsible The Ground Support Unit is primarily by the Logistics Section. The section is responsible for developing plans for medical services for incident assigned needs for the entire incident, including ordering, for set-up, maintenance, and responsible for the maintenance, services, and fuelling of all mobile responsible for providing: facilities, personnel. The unit will develop processing, and storing the use of incident communications all remote locations, (e.g., Camps, demobilization of all incident Staging Areas), as well as providing equipment and vehicles, with the transportation, communications, equipment and facilities; installing and procedures for managing major incident-related resources. support facilities except staging medical emergencies; and provide food for personnel unable to leave areas. The Facilities Unit will also exception of aviation resources. The supplies, equipment maintenance and testing of communications equipment; tactical field assignments. The Food unit also has responsibility for the fuelling, food services, medical services, supervision of the Incident medical aid. provide security services to the and ordering resources. Six units may be Communications Centre, Unit interacts with the Facilities Unit incident as needed. ground transportation of personnel, Note: Medical assistance to the public established within the Logistics Section established; and the distribution and for location of fixed-feeding site; the supplies, and equipment. or victims of the emergency is an and the Logistics Section Chief will maintenance of communications Supply Unit for food ordering; and operational function. determine the need to activate or equipment. the Ground Support Unit for deactivate a unit. If a unit is not activated. transporting food. responsibility for that unit's duties will remain with the Logistics Section □ Identify and confirm communication ☐ Establish the communications plan □ Arrange and provide response Responsible for supplying the food □ Order, receive, distribute and Set-up, maintain, and demobilize □ Responsible for the maintenance, needs for the entire incident. service and fuelling of all mobile links. for the use of incident personnel with first aid and minor track all incident equipment incident support facilities with communications equipment and medical services. including all remote locations (e.g., and supplies. the exception of staging areas. equipment and vehicles, with the Assign personnel as required. Camps, Staging Areas), as well as exception of aviation resources. ☐ List and obtain all immediate □ Develop Incident Medical Plan. □ Ordered all off-incident □ Facilities may include: Incident providing food for personnel unable resources requested by the Incident ☐ Install, test, distribute, and maintain resources including: tactical Command Post, Incident Base. Coordinates the transportation of all to leave tactical field assignments. Develop procedures for handling **Commander or Operations Section** all communications equipment. and support resources Camps, and other facilities personnel, supplies, and equipment. serious injuries of responder Works with the Planning Section -(including personnel), all within the incident area to be ■ Advise on communications □ Update the **Resources Unit** with the personnel. Resources Unit to anticipate the expendable and nonused for feeding, sleeping and □ Identify anticipated and known capabilities and limitations. status (location and capability) of numbers of personnel to be fed and expendable support supplies. sanitation services. Provide medical aid to personnel. incident service and support transportation vehicles. develop plans for supplying food to Establish telephone. requirements. Management of tool Prepare layout of facilities; ■ Assist the Finance / Administration all incident areas. communication links, and public Develop the Incident Traffic Plan as operations, including the inform appropriate unit leaders. □ Maintain continuous communications Section with processing injuryaddress systems. required. Interacts with the Facilities Unit for storage, disbursement, and related claims. with the Incident Commander. Will provide security services to service of all tools and portable location of fixed-feeding site; the ■ Establish clear and widespread the incident as needed. Note: Provision of medical assistance Develop plans to move required Supply Unit for food ordering; and non-expendable equipment. communication throughout the to the public or victims of the resources to site. the Ground and Air Support Units □ Contact local law enforcement incident. emergency is an operational function for transporting food. agencies as required. □ Confirm spending authorities with the and would be done by the Operations Finance / Admin Section. Obtain necessary equipment and Section and not by the Logistics □ Investigate and document all supplies and establish cooking Section Medical Unit. If there is a complaints and suspicious ■ Mobilize resources. facilities. requirement for victims of an incident occurrences. ■ Move required resources to site. the local public ambulance service is Order sufficient food and potable ■ Ensure strict compliance with most often utilized. □ Coordinate spending with the Finance water from the Supply Unit. applicable safety regulations. / Admin Section Chief. Maintain inventory of food and □ Provide facility maintenance water. services, e.g., sanitation, lighting, etc. ■ Maintain food services areas. **Important** ensuring that all appropriate health Demobilize base and camp Prior to beginning any activities, each person in a role must: and safety measures and being facilities. Obtain a completed ICS 201 Incident Briefing and ICS 207 Incident Organization Chart from the followed. Supervise caterers, cooks, and Throughout the duration of the incident, each person in a role must: other Food Unit personnel as ☐ Chronologically document all actions, decisions, contacts and requests on an ICS 214 Activity Log. appropriate. Copies can be found in Section 6: Forms. After the incident is over, each person in a role must: Assist with post-incident activities. All forms referenced can be found in Section 6: Forms

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Revised October 2018

General Staff Roles - Finance / Admin Section Finance / Admin Section Chief **Time Unit Procurement Unit Compensation & Claims Unit Cost Unit** The Finance / Administration Section Chief is The **Time Unit** is responsible for ensuring the All financial matters pertaining to vendor contracts. This unit oversees the completion of all forms required The Cost Unit provides all incident cost analysis. It responsible for managing all financial aspects of an accurate recording of daily personnel time, leases and fiscal agreements are managed by the by workers' compensation and local agencies. A file of ensures the proper identification of all equipment and compliance with specific agency time recording injuries and illnesses associated with the incident will incident. The Finance / Administration Section **Procurement Unit.** The unit is also responsible for personnel requiring payment; records all cost data;

□ Identify and confirm communication links.

a unit.

 Assign personnel to assume the following positions, as required: Time Unit, Procurement Unit, Compensation & Claims Unit, and Cost Unit.

Chief will determine the need to activate or deactivate

- Review legal issues with the **Incident Commander**.
- Maintain continuous communications with the Incident Commander.
- Brief agency administrative personnel on all incident-related financial issues needing attention or follow-up.
- Manage all financial aspects of an incident.

 Record daily personnel time, ensure compliance with specific agency time recording policies, and manage commissary operations if established at the incident.

policies and managing commissary operations if

established at the incident.

- Submit cost estimate data forms to Cost Unit as required.
- Ensure that all records are current and complete prior to demobilization.
- ☐ Manage finances relating to vendor contracts, leases and fiscal agreements.

Procurement Unit establishes local sources for

equipment and supplies; manages all equipment rental agreements; and processes all rental and supply fiscal

maintaining equipment time records.

Maintain equipment time records.

document billing invoices.

- Establish local sources for equipment and supplies.
 Coordinate with local jurisdiction on plans and supply sources
- Manage all equipment rental agreements. Establish contracts and agreement with supply vendors.
- Processes all rental and supply fiscal document billing invoices.
- Prepare and authorize contracts and land use agreements, as needed.

☐ Handle all matters relating to compensation for injury or property damage due to the incident.

also be maintained and all witness statement will be

obtained in writing. Close coordination with the

medical Unit is essential. The Compensation &

Claims Unit is also responsible for investigating all claims involving property associated with or involved in

- Oversees the completion of all forms required by workers' compensation and local agencies.
- Maintain a file with all the injuries and illnesses associated with the incident.
- Obtain witness statements in writing.

the incident.

- Investigate all claims involving property associated with or involved in the incident.
- Ensure the completion of a Resident Compensation Log for any out-of-pocket expenses incurred by evacuees.
- □ All claims must be submitted to the Finance and Legal departments for processing and disbursement of funds.
 - If applicable, Finance and Legal will deal with insurers as well as any other extraneous circumstances (affected parties want more, etc.).

 Collect and evaluate cost data to establish an accurate picture of the incident costs.

analyzes and prepares estimates of incident costs;

and maintains accurate records of incident costs.

- Create cost summaries, cost estimates, and cost saving recommendations.
- Prepare resources-use cost estimates for the Planning Section.
- ☐ Identify all equipment and personnel requiring payment.

Important

Prior to beginning any activities, each person in a role must:

 Obtain a completed ICS 201 Incident Briefing and ICS 207 Incident Organization Chart from the Incident Commander

Throughout the duration of the incident, each person in a role must:

B2

Chronologically document all actions, decisions, contacts and requests on an ICS 214 Activity Log. Copies can be found in Section 6: Forms.

After the incident is over, each person in a role must:

Assist with post-incident activities

All forms referenced can be found in Section 6: Forms

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Revised October 2018

Operations Section - Public Safety Roles Public Safety Group Supervisor Air Monitors Reception Centre Rep Roadblocks Rovers **Telephoners** Air Monitoring personnel are responsible Reception Centre Reps are responsible for Roadblock personnel are responsible for Rovers travel to assigned locations to locate Telephoners are responsible for the The Public Safety Group Supervisor is responsible for the management, planning, the public and personally provide public for acquiring and providing air quality establishing reception centres, managing maintaining assigned notification of impacted residences and consideration and implementation of external public protection activities for the duration readings to the Public Safety Group evacuee accommodation, communication and positions, air monitor readings and safety instructions and assistance as businesses to provide public safety of the incident. documentation for compensation purposes. communication with transients. instructions. □ Confirm communication links with the Incident Commander and Operations Section Chief. ☐ Confirm resident contact lists are ☐ Confirm resident contact lists are ☐ Use the buddy system and equip Confirm reception centre is available for In conjunction with the Public Safety each responder with reliable monitors **Group Supervisor** determine the available available and respiratory protective equipment. need for and location of roadblocks. ☐ Establish reception centre. Refer to ☐ In conjunction with the Incident Commander: determine the size of the EPZ; identify the Confirm communication links. Confirm communication links. The monitors must be capable of residents, businesses, industrial operators, and / or transients in the area; and determine the ☐ Pickup and check roadblock kits. Section 2: Roles & Responsibilities. ☐ In conjunction with the Public Safety ☐ Know safe routes in and out of the EPZ. initial public protection measures to be taken. Refer to Section 4: Emergency Response displaying readings for 1 ppm H2S Group Supervisor, determine who Confirm communication links. Proceed to roadblock locations. and LEL conditions. ■ Search for residents and transients in Procedures for guidelines on evacuation / shelter, ignition, roadblocks, rovers, public concerns, needs to be notified (residents, Confirm communication links. ■ Receive evacuees and maintain etc. Additional information for Air Monitors, Reception Centre Representative, Roadblocks, the Emergency Response and Planning businesses, area users, etc.). ■ Establish and maintain B1 Rovers, and Telephoners can be found in Section 2: Roles & Responsibilities. a Reception Centre Registration ☐ Establish roadblocks to secure the ☐ Review with the Public Safety communication with the OSCP using В6 ☐ In conjunction with the Incident Commander, Planning Section Chief, and Operations FP7 ☐ Check all buildings including barns, cellular phones or 2-way radios. **Group Supervisor** which Section Chief, develop and implement an Incident Action Plan (IAP). Arrange for food and accommodations for shops, sheds, etc. ☐ Follow the scripts and procedures in telephoner scripts to use: Review resident lists, area user lists, reception centres, and telephone numbers within the ERP. □ Provide air monitoring readings to the evacuees. Early Notification / Voluntary Evacuation the ERP. Refer to either Section 2: ■ Assist, as required, with the assist with decision making ☐ If required, establish a Regional Emergency Operations Centre (REOC). ☐ Provide evacuees with a place to Roles & Responsibilities or Section notification, evacuation or Message, Shelter-in-Place Form (evacuation / shelter / ignition). B3 | Assign personnel to assume the following positions as required: Air Monitors, Reception Phone Message, Evacuation request counselling services, if 6: Forms. sheltering of persons within В8 Centre Representative, Roadblocks, Rovers, and Telephoners. Obtain and check equipment and the EPZ. Record all contact Phone Message. required ■ Monitor area for H₂S and / or information (maps, forms, The **Telephoners** must have sufficient personnel to accommodate the following ratios with residents using the Resident Contact special needs ☐ Record and follow up on all evacuees who LEL with personal monitors when contacting residents: 1 Telephoner to every 7 residences; and 1 Supervisor for communications, reports, monitors, A5 Contact Log. residents at a Level 1 Emergency and and document readings on choose to make their own accommodation every 10 Telephoners. safety, and breathing equipment). provide them with the option to the Air Monitoring Log. Post Evacuation Notices for residents ☐ Dispatch Air Monitors at a Level 1 emergency (hand-held and mobile). □ Confirm communication links. evacuate that are not at their residence. ■ Report all H₂S and / or LEL reading □ Arrange for temporary care of livestock (if ☐ Dispatch trained personnel with the appropriate hand-held gas monitors to record Contact the other residents and area ■ Monitor closest downwind public possible) and the security of evacuated changes / increases to the Public □ Follow the scripts and users in the EPZ and advise them to concentrations at the nearest unevacuated residences downwind of the incident site. B5 location or residence. procedures in the ERP. Refer property. Safety Group Supervisor evacuate or shelter. ☐ Mobilize third party mobile air monitoring units. Monitor environment for adverse to Section 2: Roles & ☐ Establish and oversee compensation ☐ For your own safety, ensure the Contact the schools / school buses to ☐ Maintain communication with the applicable government regulator and environment Responsibilities or Section administration activities at the reception **Public Safety Group Supervisor is** make arrangements for school age agency regarding air monitoring needs and activities. A5 6: Forms notified immediately if readings are Record all readings centre. children (if applicable). Consult with the Operations Section Chief to determine the need for evacuation / approaching 10% LEL and / or 10 Monitor area for H₂S and / or on the Air Monitoring A5 Reimburse evacuees for Advise that buses in the sheltering. This is based on air monitoring readings at the nearest downwind residence ppm H₂S. LEL with personal monitors and their immediate out-ofaffected area leave Prioritize residents and area users in the EPZ to establish the order of evacuation. Coordinate B2 document readings on the Air □ Record all incoming ☐ Report all readings at established pocket expenses and log immediately and that buses evacuation or shelter of residents, area users, and transients (via Telephoners and Rovers). Monitoring Log. details on a Resident and outgoing traffic. should not enter the area. intervals to the Public Safety Group Determine who needs to be notified and what script will be used: ☐ Report all H₂S and / or LEL reading В4 Supervisor Compensation Log. personnel, and Request a school administrator Early Notification / Voluntary Evacuation Message, Shelter-in-Place equipment on the changes / increases to the Public Phone Message. Evacuation Phone Message. B6 | B7 | B8 ■ Where possible, provide evacuees with for the reception centre to For your own safety, ensure **Public** Roadblock Log. Safety Group Supervisor. assist in managing the children information regarding their property, ☐ At a Level 1 Emergency it is required to notify any special needs Safety Group Supervisor is notified livestock, and the incident. ☐ Forward information given to you by ☐ For your own safety, ensure the Public and releasing them to their residents and give them the option to evacuate. immediately if readings are approaching 10% LEL and / or 10 people passing through your location Safety Group Supervisor is notified guardians. ☐ If residences are evacuated, a reception centre must be established. ☐ Forward all media and incident inquiries to to the Public Safety Group immediately if readings are ppm H_2S . Document all resident interactions using ☐ Determine and notify landowner / occupant(s) as soon as possible. the Information Officer approaching 10% LEL or 10 ppm H₂S. Supervisor the Resident Contact Log and Prepare Mobile Monitoring ☐ Ensure the schools / school buses are contacted to make arrangements for school age ■ Report all names of evacuees who have report this information to the Maintain communication with the ☐ Report any suspicious behaviour to the children (if applicable). registered at the reception centre to the ВЗ **Public Safety Group Public Safety Group Supervisor.** Public Safety Group Supervisor who ☐ If a large number of people need to be evacuated (large industrial operations and/or ☐ If walking the pipeline right-of-way, **Public Safety Group Supervisor** Supervisor. Immediately will notify the police as required. public facilities) refer to the Area Specific Information section (white tabs) for contacts ☐ Maintain roadblock locations. Do not walk separately with the wind, □ Address resident concerns and forward advise the Public Safety Group to obtain charter buses or changes to the normal notification procedures. staving within visual contact and leave until requested to do so by the Maintain communication with the Public them to the Public Safety Group Supervisor about unsuccessful Send Rovers (if required) to identify human activity in the area which is not already **Public Safety Group Supervisor or** Safety Group Supervisor calling distance. As the lead Supervisor. contacts and any residents requiring identified within the ERP (drilling, pipeline construction, logging, hunting, farming, camping, until relieved by other Roadblock responder monitors for H2S, the assistance personnel backup responder will maintain ☐ Prepare Evacuation Notices and provide copies to Rovers. communication and be prepared to **IMPORTANT** B5 **Important** Rovers can be used to assist with notifications, assist with evacuating special rescue; and Prior to beginning any activities, each person in a role must: needs residents, assist with air monitoring, etc. **Prior** to beginning any activities, each person in a role must: ☐ SO₂ monitoring equipment will be Determine the need for helicopters to identify human activity in the area. Obtain an incident briefing, a completed Field Response Team Assignments Chart, ☐ Obtain a completed ICS 201 Incident Briefing and ICS 207 Incident called out as required. and a completed Crisis Management Team Response Team Assignment Chart Determine the need for and location of **Roadblocks** to isolate and secure the area. Organization Chart from the Incident Commander from the Incident Commander. ☐ Ensure all Roadblock personnel are properly trained and have appropriate roadblock **Throughout** the duration of the incident, each person in a role must: ☐ Chronologically document all actions, decisions, contacts and requests on an ☐ Ensure all **Roadblock** personnel have the legal authority to restrict access to the area. ICS 214 Activity Log. Copies can be found in Section 6: Forms. Throughout the duration of the incident, each person in a role must: ☐ Assess public impact outside of EPZ. See Section 5: External Agencies to determine what After the incident is over, each person in a role must: ☐ Chronologically document all actions, decisions, contacts and requests on an assistance local authorities can provide for public protection outside the EPZ. Assist with post-incident activities. Emergency Actions Log and Emergency Contact Log. Copies can be found in □ Regularly update the Incident Commander. either SECTION 2: ROLES & RESPONSIBILITIES or SECTION 6: FORMS. All forms referenced can be found in Section 6: Forms □ Confirm communication links with: Air Monitors, Reception Centre, Roadblocks, Rovers, and Telephoners. Personnel should check in at scheduled intervals. After the incident is over, each person that played a role must: Review and confirm evacuation of residents, area industrial users, transients, etc. from the area. Reguest that a Notice to Airmen (NOTAM) is issued to restrict the airspace above the EPZ. Assist with post-incident activities. Note: See Section 2: Roles & Note: See Section 2: Roles & Responsibilities for a Responsibilities for a media script for media script for Roadblock and Rover personnel. Revised January 2019 Roadblock and Rover personnel. **Location will be Incident Command Post** Located at the Incident Command Post (ICP) or the Regional Emergency Operations Location will be assigned. Location will be the reception centre. Location will be assigned. Location will be assigned. (ICP) or Regional Emergency Operations Centre (REOC). Centre (REOC)

Overview

H₂S, SO₂, LEL or other toxic substance concentrations will be monitored continuously during the incident response. It is crucial that Air Monitors continuously update the Public Safety Group Supervisor with monitored results. If air monitoring readings show high levels of H₂S, SO₂, or LEL the Public Safety Group Supervisor may need to initiate evacuation / shelter of additional residences, change the location of the roadblocks, or ignite the

Air Monitor Roles

- □ Obtain and check equipment and information (maps, forms, communications, reports, monitors, safety, and breathing equipment)
- □ Confirm communication links.
- ☐ Monitor closest downwind public location or residence.
- Monitor environment for adverse effects.
- ☐ Record all readings on the Air Monitoring Log provided.
- ☐ Report all readings at established intervals to the **Public** Safety Group Supervisor.
- ☐ For your own safety, ensure the Public Safety Group Supervisor is notified immediately if readings are approaching the following levels: 10% LEL or 10 ppm H₂S.
- ☐ Prepare Mobile Monitoring Plan.
- ☐ If walking the pipeline right-of-way, walk separately with the wind, staying within visual contact and calling distance. As the lead responder monitors for H2S, the backup responder will maintain communication and be prepared to rescue: and
- □ SO₂ monitoring equipment will be called out as required.
- ☐ Document activities using the ICS 214 Activity Log.
- ☐ Assist with post-incident activities.

Time

19:06

19:15

19:25

☐ Monitor H₂S and LEL concentrations along the edge of the EPZ to determine if sheltering and/or evacuation criteria has been met beyond the EPZ.

Location of Samples

12-05-13-16 W5M

12-05-13-16 W5M

12-05-13-16 W5M

Air Monitoring Equipment

Air monitoring equipment is used to:

- · Track the plume
- · Determine if ignition criteria are met.
- Determine whether evacuation and / or shelter-in-place criteria have been met.
- · Assist in determining when the emergency can be downgraded.
- Determine roadblock locations.
- · Determine concentrations in areas being evacuated to ensure that evacuation is safe.

Tips

- ☐ **Air monitors** should be dispatched at a Level 1 Emergency.
- ☐ Ensure all equipment is operational and the appropriate documentation is available to verify testing and calibration requirements.
- ☐ Use the buddy system and equip each responder with reliable monitors and respiratory protective equipment. The monitors must be capable of displaying readings for 1 ppm H₂S and LEL conditions.
- ☐ Breathing apparatus be prepared to don apparatus quickly.

Air Monitoring Log - Example

Temp (°C)

19

18

17

Other

- ☐ Ensure all personnel have a personal gas monitor.
- ☐ Speed and direction of wind may vary, therefore, be prepared to track gas plume.
- ☐ Record all information:

SO₂

(ppm)

10

12

12

LEL

(%)

(ppm)

5

O₂ (%)

- Concentrations in ppm or ppb
- · Location and time of readings
- · Wind speed and direction

Regulatory Requirements

public.

HVP Product Release

be present.

Sour Gas Release - Manned Operations

- · Critical / Special Sour Wells & EPZ includes a portion of urban density development or urban centre:
 - · Must be minimum of two mobile air monitors: one to monitor the boundary of the urban density development or urban centre and the other to track the plume.

The licensee must also:

- Ensure that one unit is in the area during drilling and / or completion. testing, and workover operations in potentially critical sour zones.
- Ensure that the other unit is dispatched if it is evident that well control measures are deteriorating and that a sour gas release is likely to occur.
- · Prior to conducting operations in the sour zone, determine where the monitoring equipment is located and what the estimated travel time is to the well site.
- · Critical / Special Sour Wells whose EPZ does not include a portion of an urban density development or urban centre and for all noncritical sour wells:

The licensee must:

Wind Conditions *

Speed (km/hr)

12

11

11

From

NW

NW

NW

- Dispatch a mobile air quality monitoring unit(s) when it is evident that well control measures are deteriorating and that a sour gas release is likely to occur
- Prior to conducting operations in the sour zone, determine where the monitoring equipment is located and what the estimated travel time is to the well site.

Comments

Picked up 5 ppm reading upon

entering lease access. Contacted control room at plant.

H₂S reading increased 1 ppm at the

access point.

No change in readings. Wind and

temperature is down.

Downgrading Level of Emergency

• The decision to downgrade an incident will be based on the air monitoring results.

Form A5

Choosing a Position

1. Using your map and the current wind conditions, travel downwind, with priority being directed to the nearest unevacuated residence or area where people may be present.

Sour Gas Release - Unmanned Operations

area where people may be present.

· If notified of a release by an alarm or by a reported odour, the

Air quality monitoring occurs downwind, with priority

being directed to the nearest unevacuated residence or

The licensee is expected to provide monitored H₂S and SO₂

information on a regular basis throughout a sour gas

emergency to the relevant government regulator, environmental

agency, health authority, local authorities, and on request to the

Monitoring may occur downwind or upwind depending on how

the plume is tracking, with priority being directed to the

nearest unevacuated residence or areas where people may

The licensee is expected to provide monitored HVP product

LEL information on a regular basis throughout the emergency

to the relevant government regulator, environmental agency,

health authority, local authorities, and on request to the public.

out Air Monitors upon confirmation of the release location.

licensee must investigate the source of the release and send

2. Confirm the location with the Public Safety Group Supervisor and make sure you have a safe route to the assigned location that does not cross the hazardous area.

Record Information

Record information on the following forms located within this Section:

☐ Air Monitoring Log ☐ ICS 214 Activity Log

	-
Form	Form
A5	ICS

Reporting and Contacts

Air	Monitors	report to the	Public Safety	y Group	Supervisor.
		Toport to the	. abiio caiot	, - ap	Capoi vicoi.

name.	
Phone Number:	
Thoric Number.	
Reception Centre	

Location: Phone Number:

Wind Direction:

* Estimate meteorological conditions where accurate readings are not available.

Monitor

Revised
October 2018

A5 Air Monitoring Log

-			200	 						
	Core Emergency Response Plan			Comments						
				Wind Conditions * Speed rom (km/hr)						
				Wind O From						
				Temp (°C)						
		ne:	ition:	Other						
		Responder Name:	Responder Position:	SO ₂ (mdd)						
		Resp	Resp	0 (%)						
				LEL (%)						
				(mdd)						
)			of	Location of Samples						
		Date:	Page	Time						

*Estimate meteorological conditions where accurate readings are not available.

ICS 214 Activity Log

CS 214 Activity Lo	9		Core Emergency Response Pla
Incident Name:			
Date / Time Initiated:			
Prepared by:		Position / Titl	e:
Personnel Assigned			
Name	ICS P	osition	Location
A adjuidad Law			
Activity Log Time		Actions	

Overview

In the event of an emergency in which residents need to be evacuated, a Reception Centre must be established to receive and register the evacuees. A Reception Centre Representative is assigned to manage / coordinate activities at the Reception Centre. The Reception Centre Representative continuously updates the Public Safety Group Supervisor with a list of those who have, and have not, checked in at the Reception Centre.

Reception Centre Rep Roles

- ☐ Confirm Reception Centre is available for use.
- ☐ Establish Reception Centre.
- ☐ Confirm communication links.
- ☐ Receive evacuees and maintain a Reception Centre В1 Registration Log.
- ☐ Arrange for food and accommodations for the evacuees.
- ☐ Provide evacuees with a place to request counselling services, if required.
- ☐ Record and follow up on all evacuees who choose to make their own accommodation arrangements.
- ☐ Arrange for temporary care of livestock (if possible) and the security of evacuated property.
- ☐ Establish and oversee compensation administration activities at the reception centre.
- ☐ Reimburse evacuees for their immediate out-of-pocket expenses and log details on a Resident Compensation Log.
- ☐ Where possible, provide evacuees with information regarding their property, livestock, and the incident.
- Form C2 ☐ Forward all media and incident inquiries to the Information Officer.
- □ Report all names of evacuees who have registered at the Reception Centre to the Public Safety Group Supervisor.
- ☐ Document activities using the ICS 214 Activity Log.
- ☐ Assist with post-incident activities.
- □ Confirm information to be released to public with the Information Officer.
- □ Address resident concerns and forward them to the Public Safety Group Supervisor.

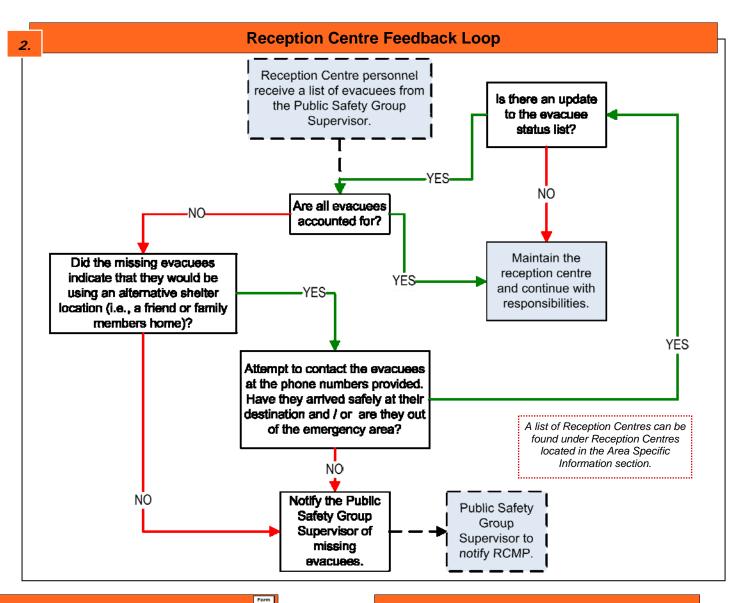
Choosing a Reception Centre

- □ Reception Centres are usually located in schools, hotels / motels, or community halls.
- ☐ It may be useful to coordinate the location of the Reception Centre with the local authority (city, town, county, M.D., etc.).
- ☐ See Area Specific Information (white tabs) for pre-identified Reception Centres in your area.
- A Reception Centre should:
- ☐ Have a conference room of some type where a large number of people can gather.
- ☐ Have conferencing services including fax machine, internet access, and phone access.
- ☐ Be large enough to house all of the evacuees.
- ☐ Be outside of the hazard area.
- ☐ Allow residents to evacuate to the Reception Centre without travelling through the hazard area.
- ☐ Allow pets.

Tips

- ☐ Ensure you have enough staff to handle the needs of all of the evacuees.
- ☐ Allow evacuees to vent their emotions.
- ☐ Do not make any promises that cannot be kept.
- ☐ Attempt to reunite families as quickly as possible.
- □ Document the details of anyone who may have trouble coping with the incident so that they can be given proper psychological support.
- ☐ Monitor whether residents that have been contacted by the Telephoners, Rovers, and Roadblock personnel have checked in at the Reception Centre.

Destination Phon #



Reception Centre Registration Log - Example

Name (List all names in party) # of Depart Number Arrival Resident ID (Where they can be Time **Occupants** Arrived First Last reached) G124-A John Doe 2 2 19:06 19:21 555-555-5555 555-555-5555 H131-B Jane Doe 3 3 19:12 19:28 F122-A 5 3 555-555-5555 Doe 19:20 James

John and his wife arrived safely then left to stay at a friend's house in Red Deer. Jane and her 2 children arrived safely then left to stav with her mother in Bentlev. James, his wife and 1 child arrived safely. The other two children are away on a school trip. They will stay at the reception centre for the night.

Comments

В1

Media Statement

Refer all media inquiries to the Media Representative in Calgary. However, if they insist on a statement, please use the following:

"We are currently dealing with the situation at hand to ensure the safety of the public, our personnel, and the environment. A statement will be released by the company once the facts have been determined. If you would like to leave your business card or phone number, a company representative will provide you with more information as it becomes available."

Note: See Section 3.0 Communication & Media for more information on media

Record Information

Record information on the following forms located within this Section:

- ☐ Reception Centre Registration Log
- ☐ Resident Compensation Log
- ☐ ICS 214 Activity Log
- ☐ Media Contact Log

FORIM	 LOI
ICS 214	В

Form	Form
В1	B2

Form	Form	
B2	C2	

Reporting and Contacts

The Reception Centre Representative reports to the Public Safety
Group Supervisor.

Name: Phone Number:

Reception Centre

Location: Phone Number:

Wind Direction:

Revised

B1 RECEPTION CENTRE REGISTRATION LOG

)ate:					Responder	Name:						
age	of											
	NAME	(LIST ALL.)	NAMES II	v I						NATION		
ESIDENT ID	FIRST	(LIST ALL I PARTY)) LAST		# OF OCCUPANTS	NUMBER ARRIVED		DEPART TIME	PHC (Where the	NE # hey can be		COMMENTS
				\neg					Rac	incu)		
		VT CC	OMP)		ATION	LOG	re	Tuama T		,	CORE EMEI	r
		NT CC	OMP	ENS.		LOG			elephone #: s Telephone		CORE EMEI	RGENCY RESPONSE :
Resident's			OMP		Address:	LOG		Busines		# :	CORE EME	RGENCY RESPONSE I
Resident's	s Name:			Home A	Address:	LOG		Busines	s Telephone	# :		T
Resident's	s Name: f Residents E	ivacuated:		Home A	Address: ted to:			Busines	s Telephone ne#While E	# :		Location of Land (LSD):
Resident's	s Name: f Residents E	ivacuated:		Home A	Address: ted to:			Busines	s Telephone ne#While E	# :		Location of Land (LSD):
Resident's	s Name: f Residents E	ivacuated:		Home A	Address: ted to:			Busines	s Telephone ne#While E	# :		Location of Land (LSD):
Resident's	s Name: f Residents E	ivacuated:		Home A	Address: ted to:			Busines	s Telephone ne#While E	# :		Location of Land (LSD):
Resident's	s Name: f Residents E	ivacuated:		Home A	Address: ted to:			Busines	s Telephone	# :		Location of Land (LSD):
Resident's	s Name: f Residents E	ivacuated:		Home A	Address: ted to:			Busines	s Telephone	# :		Location of Land (LSD):
Resident's	s Name: f Residents E	ivacuated:		Home A	Address: ted to:			Busines	s Telephone	# :		Location of Land (LSD):
Resident's	s Name: f Residents E	ivacuated:		Home A	Address: ted to:			Busines	s Telephone	# :		Location of Land (LSD):
Resident's Number of	s Name: f Residents E	ivacuated:		Home A	Address: ted to:			Busines	s Telephone	# :		Location of Land (LSD):
Resident's Number of	s Name: f Residents E	LOCATION	ION T	Home A	Address: ted to:			Busines	s Telephone	# :		Location of Land (LSD):

ICS 214 Activity Log

			Core Emergency Response Plan
Incident Name:			
Date / Time Initiated:			
Prepared by:		Position / Title:	
Personnel Assigned			
Name	ICS Po	sition	Location
Activity Log			
Time		Actions	

Overview

In the event of an emergency, roadblock locations and road detours will be established. The company will initially establish and maintain roadblocks until relieved by highway maintenance contractors or the RCMP. Roadblock personnel will be assigned in teams of two, one member to stop approaching traffic, the other will record the information gathered and relay to The Public Safety Group Supervisor. The Public Safety Group Supervisor must be continuously updated by Roadblock personnel so that all vehicles entering and exiting the EPZ are accounted for.

Roadblock Personnel Roles

- ☐ In conjunction with the Public Safety Group Supervisor, determine the need for and location of roadblocks.
- ☐ Pickup and check roadblock kits.
- □ Proceed to roadblock locations.
- □ Confirm communication links and establish communication interval
- ☐ Establish roadblocks to secure the EPZ.
- ☐ Follow the scripts and procedures in the ERP.
- ☐ Knowledge and ability to communicate safest route away from
- ☐ Monitor area for H₂S and / or LEL with personal monitors and A5 document readings on the Air Monitoring Log.
- □ Report all reading changes / increases to the Public Safety Group Supervisor.
- ☐ For your own safety, ensure the Public Safety Group Supervisor is notified immediately if readings are approaching 10% LEL and / or 10
- ☐ Move location of Roadblock immediately if readings are approaching 10% LEL and / or 10 ppm H₂S.
- □ Record all incoming and outgoing traffic, personnel, and equipment on the Roadblock Log.
- ☐ Forward information given to you by people passing through your location to the **Public Safety Group Supervisor**.
- □ Document activities using the ICS 214 Activity Log.
- ☐ Maintain communication with the Public Safety Group Supervisor.
- ☐ Maintain roadblock locations. Do not leave until requested to do so by the Public Safety Group Supervisor or until relieved by other Roadblock personnel
- Assist with post-incident activities.

Roadblock Kit Contents - Sample

The roadblock kit may contain the following items:

Recommended

- ☐ Direct communication capability (radio, cell phone, etc.)
- ☐ ERP maps and roadblock forms
- ☐ Flashlight and batteries
- ☐ High visibility / reflective vests
- ☐ Orange traffic cones / reflectors
- ☐ Pens and / or pencils
- ☐ Personal Air Monitoring Device (H₂S, CO, O₂, LEL) ☐ Portable rotating emergency light
- □ SCBA
- ☐ Hand-held stop sign with reflective tape
- Waterproof bag

Optional

- ☐ Caution tape
- Rain suit
- Road barrier

Tips

- ☐ When talking to motorists at the roadblock, ONLY provide them with the information as directed by the Public Safety Group Supervisor.
- ☐ Ask for identification prior to granting access.
- ☐ You do not have the legal authority to restrict access to the area without an order from the relevant authority. Report any person who chooses to proceed, without permission, through the roadblock.
- ☐ Check with the motorists and ensure all members of their residence are accounted for and documented on the Resident Contact Log. Report any resident that is left behind in the EPZ.
- ☐ The roadblock should be setup to allow optimal visibility and sufficient distance for traffic to come to a safe and complete stop.
- □ Roadblock personnel should be highly visible on the side of the road and have an escape route in case of an emergency.
- ☐ DO NOT leave your position until you are directed to do so.

Choosing a Roadblock

Roadblocks should be established:

- ☐ Approximately where the EPZ intersects any highways / roads.
- ☐ Outside of the hazard area.

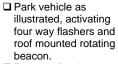
2.

- ☐ At a conspicuous location where the **Roadblock** personnel will be visible to approaching traffic, providing them with enough time to safely stop.
- At a location where traffic can easily turn around or detour (consider the potential for larger vehicles such as buses, semi-trailers, drilling rigs, etc.).
- ☐ Where possible at natural roadblock locations (e.g., gates, bridges, junctions, etc).

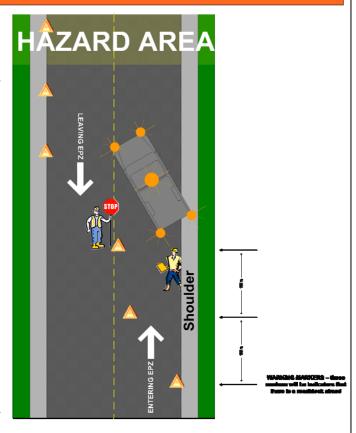
Before Departure

- ☐ Make sure your vehicle is equipped and suitable for the travel conditions.
- ☐ Check roadblock kit to confirm all items are present (see sample of roadblock kit contents to
- ☐ Confirm that your handheld monitor for H₂S and / or LEL is functioning properly.
- ☐ Check all communications devices.
- ☐ Check that the red signaling baton flashlight is working and has spare batteries.
- ☐ Confirm that you have enough copies of the Roadblock Log form.
- □ Confirm the location of the roadblock with the Public Safety Group Supervisor and make sure you have a safe route to the assigned location that does not cross the hazardous area.

Setting up a Roadblock



- ☐ Put on reflective vests. ☐ Take a reading with your handheld monitor
- for H₂S and / or LEL; ensuring your Form roadblock is not too A5 close to the edge of
- the EPZ. Record readings on the Air Monitoring Log. ☐ Notify the Public
- Safety Group Supervisor once your roadblock is set up. ☐ Continue to monitor
- and record H₂S and / or LEL levels at scheduled intervals. Report to the **Public** Safety Group Supervisor at scheduled intervals
- Maintain roadblock until the emergency is over and the "all clear" message is given or until relieved by other Roadblock personnel



Reporting and Contacts

Roadblock personnel report to the Public Safety Group Supervisor.

Phone Number:

Reception Centre Location:

Wind Direction:

Phone Number:

□ Distance ☐ Bends in the road ☐ Level of the ground

the local authority.

□ Visibility

through the declaration of a State of Local Emergency by Remember to:

Remain calm

☐ Be courteous

When establishing a roadblock consider:

To give motorists time to prepare to come to a stop, it is

available collapsible reflective triangles 100 metres apart, at

Roadblock personnel cannot force an evacuation or restrict

access to the area unless proper authority has been

granted. The authority for forced evacuation is gained only

a minimum distance of 200 metres before the roadblock.

recommended that the Roadblock personnel set up all

□ Record names ☐ Notify the Public Safety Group Supervisor

How to Stop Traffic

- 1. Hold the reflective stop / slow paddle erect and away from your body. Never wave the sign.
- 2. Look directly at the approaching driver.
- 3. Raise your free arm with the palm of your hand exposed to the driver.
- 4. Bring the vehicle to a full stop.
- 5. After the first vehicle has stopped, move to a spot (near the centre line of the roadway) where you can be seen by other approaching vehicles.

Because visibility is reduced at night, it is important that you use utmost care when stopping traffic through a roadblock area, and that you protect yourself from injury by:

- ☐ Standing in a safe position on the shoulder of the road.
- ☐ Waving the red signaling baton flashlight back and forth.

Note: The red signaling baton flashlight should only be used in place of the reflective stop / slow paddle at night or in conditions of low / poor visibility.

Roadblock Script

"I am representing [Insert Company Name] and we are presently experiencing control problems ahead. This situation is serious enough to warrant restricted access beyond this point. For your own safety I must ask you not to proceed."

5b.

- ◆ Record driver's name, vehicle make, colour, etc. and at least the license plate number of all vehicles approaching your roadblock; also make a note of the time and of the direction the vehicle took when leaving (e.g., east, south, west, north) on your log sheet.
- ♦ Remember you have no legal position to restrict access to the general public. You are there to protect and notify - to protect the health and safety of the people by notifying them of the danger and secondly to protect the property of the residents who have evacuated the area.
- ♦ Should someone continue into the restricted area, regardless of your warning about personal safety, then use the 2-way radio or cell phone to notify the Public Safety Group Supervisor and the matter shall be immediately turned over to the Police.

Media Statement

If the media arrives at your roadblock location, company personnel may give the following statement:

"We are currently dealing with the situation at hand to ensure the safety of the public, our personnel, and the environment. A statement will be released by the company once the facts have been determined. If you would like to leave your business card or phone number, a company representative will provide you with more information as it becomes available."

Contact the **Public Safety Group Supervisor** if a media representative arrives at your roadblock.

NEVER offer your opinion of what is happening at the location to a media person or stranger. This can be interpreted as the company's position. DO NOT give statements, other than the above message, regarding the emergency situation to the MEDIA. Refer them to the Information Officer.

Be courteous but firm.

If the questioning persists, just keep politely repeating word for word the statement above.

Record Information

Record information on the following forms located within this section:

- ☐ Roadblock Log ☐ Resident Contact Log
- ☐ Air Monitoring Log ☐ ICS 214 Activity Log

Form	Ш	Form	Fe
214		A5	Е
	' '		

rm	Form	Ш	F
5	В3		В

В4

Possible Scenarios for Roadblock Personnel:

- ♦ Motorist obeys request and drives away from the EPZ.
- ♦ Motorist is leaving the EPZ and agrees not to return until further notice.
- Emergency responders (service companies, fire, ambulance, etc.) are entering the EPZ to help respond to the incident.
- Motorist disobeys request to leave the area and enters the EPZ.

In all cases, notify the Public Safety Group Supervisor and log all information.

<u>d D l O C K</u>

June 2018

B3 Resident Contact Log

			Core Emergency Response Pla
Date:		Responder Name:	
Page	of	Responder Position:	Responders Phone No.:

02000 DO	and the same of th			Number	of people	Assistance or		
Time	Resident name	Resident ID	Shelter / Evacuate	Inside	Outside	transportation required?	Comments	
			O Shelter O Evacuate			O Yes O No		
			O Shelter O Evacuate			O Yes O No		
			O Shelter O Evacuate			O Yes O No		
			O Shelter O Evacuate			O Yes O No		
			O Shelter O Evacuate			O Yes O No		
			O Shelter O Evacuate			O Yes O No		
			O Shelter O Evacuate			O Yes O No		
			O Shelter O Evacuate			O Yes O No		
			O Shelter O Evacuate			O Yes O No		
			O Shelter O Evacuate			O Yes O No		
			O Shelter O Evacuate			O Yes O No		
			O Shelter O Evacuate			O Yes O No		

B4 Roadblock Log

			Core Emergency Response Plan
Date:		Responder Name:	
Page	of	Responder Position:	Responders Phone No.:

Only emergency responders should be allowed to enter the Emergency Planning Zone (EPZ).

Vehicle Type	License plate # and province / state	Name of driver (if available)	# of people in vehicle	Time entering Zone	Time Exiting Zone	Comments (record all vehicles turned away)

ICS 214 Activity Log

	94 945			Core Emergency Response Plan
Incident Nam	e:			
Date / Time I	nitiated:			
Prepared by:			Position / Title:	
Personnel A	ssigned			,
	Name	ICS Po	sition	Location
Activity Log		1		
Time			Actions	
	1			

Rover Personnel Roles

- ☐ Confirm resident contact lists are available.
- ☐ Confirm communication links.
- ☐ Know safe routes in and out of the EPZ.
- ☐ Search for residents and transients in the Emergency Planning and Response Zones.
- ☐ Check all buildings including barns, shops, sheds, etc.
- ☐ Assist, as required, with the notification, evacuation or sheltering of persons within the Emergency Planning _{B3} Zone. Record all contact with residents using the Resident Contact Log.
- ☐ Post Evacuation Notices for residents that are not at their B5 residence
- ☐ Follow the scripts and procedures in the ERP.
- ☐ Monitor area for H₂S and / or LEL with personal monitors and document readings on the Air Monitoring Log.
- □ Report all reading changes / increases to the Public Safety Group Supervisor.
- ☐ For your own safety, ensure the Public Safety Group Supervisor is notified immediately if readings are approaching the following levels: 10% LEL and / or 10 ppm H₂S.
- ☐ Report any suspicious behaviour to the Public Safety
- Group Supervisor who will notify the police as required. □ Document all activities using the ICS 214 Activity Log.
- ☐ Maintain communication with the Public Safety Group Supervisor.
- ☐ Assist with post-incident activities.

Media Statement

If a media representative approaches you, company personnel may give the following statement:

"We are currently dealing with the situation at hand to ensure the safety of the public, our personnel, and the environment. A statement will be released by the company once the facts have been determined. If you would like to leave your business card or phone number, a company representative will provide you with more information as it becomes available.'

Contact the Public Safety Group Supervisor if a media representative approaches you.

NEVER offer your opinion of what is happening at the location to a media person or stranger. This can be interpreted as the company's position. DO NOT give statements, other than the above message, regarding the emergency situation to the MEDIA. Refer them to the Information Officer.

Be courteous but firm. If the questioning persists, just keep politely repeating word for word the statement above.

Reporting and Contacts

reporting and contacts	
Rovers report to the Public Safety Group Supervisor.	
Name:	
Phone Number:	
Reception Centre:	
Location:	
Phone Number:	
Wind Direction:	

Evacuation Notice - Example



EVACUATION NOTICE

[Insert Company Name] has an emergency at its nearby location.

As a safety precaution, please leave the area in a (north / east / south / west) direction and proceed to the **Reception Centre located at**

[Insert Company Name] representatives will be available at the Reception Centre to address your questions or concerns.

For assistance, call [Insert Company Name] at

Thank you

Tips

Remember to:

- □ Remain calm
- ☐ Be courteous
- □ Document all actions and comments
- ☐ Notify the Public Safety Group Supervisor

Remember to use a handheld H₂S and / or LEL monitor to continually test the atmosphere. Report all H₂S and / or LEL reading changes / increases to the **Public Safety Group Supervisor**.

Response personnel cannot force an evacuation or restrict access to the area unless proper authority has been granted. The authority for forced evacuation is gained only through the declaration of a State of Local Emergency by the local authority.

Before Departure

☐ Protect yourself

☐ Ensure you are equipped with all necessary equipment:

□ SCBA

□ Gas monitors

☐ Mobile communications or other form of communication

☐ Vehicle (4x4) with full tank of fuel

■ Map

☐ Confirm that your handheld monitor for H₂S and / or LEL is functioning properly.

☐ Confirm that you have enough copies of the Evacuation Notice.

☐ Confirm your assignments with the Public Safety Group Supervisor and make sure you have a safe route to the assigned location that does not cross the hazardous area.

Notifying Residents / Transients

The Public Safety Group Supervisor may request you to patrol the Emergency Planning and Response Zones in search of transients (people passing through the area) and / or residents that couldn't be reached by phone. Make contact with residents / transients and after providing an explanation record their names, contact information, purpose for being in the area (travelling through, live in the area, etc.), current condition, timing of your arrival, and whether or not they require evacuation assistance.

"Hi, I am [Insert Name] representing [Insert Company Name]. The company is presently experiencing control problems at a nearby location. The situation is serious enough that we are evacuating the public in the area. For your own safety I must ask you to leave the area immediately and check in with a company representative at the Reception Centre. Representatives at the Reception Centre will address any questions you may have and will make arrangements for your temporary accommodations.'

- ☐ Ask if they will require evacuation assistance and arrange additional transportation assistance if
- ☐ Make sure they are all accounted for.
- ☐ Ensure they gather any supplies they will need for the next 24 hours (medicines, baby food, diapers,
- ☐ If they are able to transport themselves to the Reception Centre provide them with directions that will keep them away from the hazard.
- ☐ Ask them if they have any questions.
- ☐ Provide them with your name and contact information in case they need assistance later.
- ☐ Report to the Public Safety Group Supervisor.

Requested Evacuation Assistance

The Public Safety Group Supervisor may request you to provide evacuation assistance for residents that have requested it. Ensure you obtain the number of residents requiring assistance, resident's names, location (legal and address), and the reason evacuation assistance is required (medical issue, children home alone, etc). A **Telephoner** should have already contacted and explained the situation to the residents; however, it is a good idea to confirm with the Public Safety Group Supervisor that they know you are coming to assist them. If they have not already been informed, contact the resident to tell them you are on your way and provide an estimated time of arrival.

"Hi, I am [Insert Name] representing [Insert Company Name]. I am here to help you evacuate out of the hazard area and make sure you arrive safely at the Reception Centre. A company representative at the Reception Centre will address any questions you may have and will make arrangements for your temporary accommodations.

- ☐ Try not to scare them. They are aware you might be coming but don't know what to expect.
- Make sure they are all accounted for.
- ☐ Ensure they gather any supplies they will need for the next 24 hours (medicines, baby food, diapers,
- ☐ Ask them if they have any questions.
- ☐ Once you are satisfied that all personnel from the residence are accounted for, deliver them to the
- ☐ On the way to the Reception Centre, notify the Public Safety Group Supervisor of your progress and estimated time of arrival at the Reception Centre.
- ☐ Ensure that the residents check in at the Reception Centre with the Reception Centre Representative before you leave for your next assignment.

Record Information

Record information on the following forms located within this section

- ☐ Resident Contact Log ☐ Air Monitoring Log
- ☐ ICS 214 Activity Log
- Evacuation Notice



June 2018

B3 Resident Contact Log

r			-									
Core Emergency Response Plan		Responders Phone No.:		Comments								
			Accietance or	transportation required?	O Yes O No	oy C	O Yes O No	O Yes O No	O Yes O No	oN C	on C	oN C
			ola oca y	Inside Outside								
		-		Inside								
	Responder Name:_	Responder Position:		Shelter / Evacuate	O Shelter O Evacuate	O Shelter O Evacuate	O Shelter O Evacuate	O Shelter O Evacuate	O Shelter O Evacuate	O Shelter O Evacuate	O Shelter O Evacuate	O Shelter O Evacuate
				Resident ID								
		of		Resident name								
	Date:	Page		Time								

O Shelter

ICS 214 Activity Log

	Activity Log			Core Emergency Response Plan
Incident Nam	e:			
Date / Time I	nitiated:			
Prepared by:			Position / Title:	
Personnel A				
	Name	ICS Po	sition	Location
Activity Log				
Time			Actions	

Overview

In the event of an emergency in which residents and area users need to be sheltered and / or evacuated, a team of Telephoners will be established to contact people in the area and provide instructions to ensure their safety. The Public Safety Group Supervisor must be continuously updated with the Telephoners progress so that unsuccessful contact attempts and requests for evacuation assistance can be followed up on immediately.

Telephone Personnel Roles

- ☐ Confirm resident contact lists are available.
- Confirm communication links.
- ☐ In conjunction with the Public Safety Group Supervisor, determine who needs to be notified (residents, businesses, area users, etc.).
- ☐ Review with the Public Safety Group Supervisor the telephoner scripts to be used: Early Notification / Voluntary Evacuation Message, Shelter-in-Place Phone Message, Evacuation Phone Message
- ☐ Contact special needs residents at a Level 1 Emergency and provide them with the option to evacuate
- ☐ Contact the other residents and area users in the EPZ and advise them to evacuate or shelter
- ☐ Contact the schools / school buses to make arrangements for school age children (if applicable) ☐ Advise that buses in the affected area leave immediately and that buses
- should not enter the area. Request a school administrator for the reception centre to assist in
- managing the children and releasing them to their guardians. ☐ Document all resident interactions using the Resident Contact Log В3 and report this information to the Public Safety Group Supervisor. Immediately advise the Public Safety Group Supervisor about unsuccessful contacts and any residents requiring assistance.
- ☐ Document all activities using the ICS 214 Individual Activity Log.
- ☐ Assist with post-incident activities

Shelter-In-Place Instructions

- ☐ Immediately gather everyone indoors and stay there. Do not leave even if
- you see people outside. ☐ Close and lock all outside doors and windows. Tape gaps around doors and windows. Leave all inside doors open.
- $oldsymbol{\square}$ Turn off appliances or equipment that blows out indoor air or sucks in outside air.
- ☐ Turn down furnace thermostats to the minimum setting and turn off air conditioners.
- $oldsymbol{\square}$ Extinguish all potential sources of ignition (do not smoke or attempt to start vour vehicle)
- $oldsymbol{\square}$ Stay off of the phone so that you can be contacted by emergency personnel.
- $oldsymbol{\square}$ Stay tuned to local radio and television for possible updates.
- Note: For the full Shelter-In-Place instructions see page 2 of the Shelter-In-Place Telephoner Text form located in SECTION 6.0: FORMS.

Who to Contact

- Residents
- ☐ Schools / School Bus Transportation
- □ Businesses
- Public Facilities ☐ Recreation Areas
- ☐ Urban Centres (contact local authority to coordinate)
- ☐ Area Users (other oil and gas operators, rail, logging, etc.)
- □ Trappers
- ☐ Guides / Outfitters
- ☐ Grazing Lease / Allotment Holders
- Priority is given to:
- ☐ Those closest to the hazard
- ☐ Those downwind of the hazard
- ☐ Those with sensitivity issues (health issues, require assistance, etc.)

Tips

- ☐ Ensure you have enough personnel to quickly and efficiently shelter / evacuate the required residents / area users.
- ☐ A general guideline is to have one **Telephoner** for every seven residences that need to be contacted and one Telephoners Leader for every ten Telephoners.
- ☐ Special needs residents should be contacted at a Level 1 Emergency and given the option to evacuate

Response personnel cannot force an evacuation or restrict access to the area unless proper authority has been granted. The authority for forced evacuation is gained only through the declaration of a Local State of Emergency by the local authority.

Shelter-In-Place Phone Message

Hello, this is	(your name)	of	(company nam	<u>e)</u>
Is this the	(name)	residence at	(telephone number)	?
(company name)	is responding to a (p	otential) emergency at	(location)	in your
area.				

For your safety, it is extremely important that you, and those with you, stay indoors until the potential hazard no longer exists, or you are advised to evacuate

To help us understand your immediate needs, we need to know:

How many people are at your location now?

Children

Is there anyone in your household that you cannot contact to inform them of the situation and advise them to get in doors or stay out of the area?

☐ Yes ☐ No

IF YES Whom? Location of the person(s)

We will send someone to find them as soon as possible.

Do you have children in school at this time?

☐ Yes ☐ No

В7

B8

What school? Children's names

We will contact the school to ensure the safety of your children. Buses will be directed to leave the area immediately. If school is in session, your children will be redirected to the reception centre by their regular bus driver when the school day is over.

Do you have the "Shelter-in-Place" instructions previously provided to you by _____(company name)

Please follow the Shelter-in-Place instructions located inside the resident pamphlet.

Verbally walk the resident through the Shelter-in-Place instructions on the next page,

Do you understand what I have told you?

Is there an alternate number we can contact you at?

If you have any urgent questions, please contact <u>(company name)</u> at <u>(telephone number)</u> Thank you for your cooperation.

(Pass on all information regarding this call to the Public Safety Group Supervisor immediately)

Note: Refer to Shelter-in-Place instructions on page 2 of the Shelter-in-Place Phone Message located in this section.

Telephoner Communication Flow

	- •	Shelter-In-Place Message	Provide Public Safety Group Supervisor with a list of unsuccessful— contacts.
Telephoners receive a list of residents / area users from the Public Safety Group Supervisor.	Provide appropriate message	Evacuation Message	Provide Public Safety Group Supervisor with a list of unsuccessful contacts and those requiring evacuation assistance. Public Safety Group Supervisor to disparate Rovers
	i -	Voluntary Evacuation Message	Provide Public Safety Group Supervisor with a list of unsuccessful contacts, those choosing to evacuate, and those requiring

evacuation assistance

Evacuation Phone Message

lello, this is	(your	<u>name)</u> of	(company na	<u>me) </u>
this the	(name)	residence at	(telephone nu	mber)
(company name)	is responding	to a (potential) emergency at	(location)	in your area

For your safety, it is extremely important that you and your family leave your residence immediately and travel in a north / east / south / west direction to our reception centre located at:

To help us understand your immediate needs, we need to know:

How many people are at your location now?

Is there anyone in your household that you cannot contact to inform them of the situation and advise them to evacuate away from the area?

☐ Yes ☐ No

IF YES Whom?

Location of the person(s) We will send someone to find them as soon as possible.

Do you have children in school at this time?

Children's names

77 Yes 77 No IF YES What school?

> We will contact the school to ensure the safety of your children. Buses will be directed to leave the area immediately. If school is in session, your children will be redirected to the reception centre by their regular bus driver when the school day is over.

Do you require evacuation / transportation assistance?

IF YES We are sending someone to assist you. Please stay indoors and close all doors and windows until a Rover or the local police arrive to evacuate you.

Provide the resident with:

- ☐ Directions to safely travel to the reception centre
- ☐ A list of items to bring with them to the reception centre (medications, cell phone, etc.)
- \square An idea of how long they may be expected to stay at the reception centre \square The option to bring their house pets to the reception centre

if you are unable to make it to the reception centre for any reason. Please keep your phone line free so that we can contact you if necessary.

Is there an alternate number we can contact you at?

lispatch

A company representative at the reception centre will address any questions you may have and will make arrangements for your temporary accommodations. Do you understand everything I have told you? Are you leaving immediately?

If you have any urgent questions, please contact (company name) at (telephone number). Thank you for your cooperation.

(Pass on all information regarding this call to the Public Safety Group Supervisor immediately)

Record Information

Record information on the following forms located within this section:

■ Resident Contact Log

Wind Direction:

- ☐ ICS 214 Individual Activity Log Form Form Form Form Form
- Voluntary Evac Message ☐ Shelter-in-Place Message ■ Evacuation Message

- 3	ICS 214	B3	B6	B7	B8

Reporting and Contacts

Telephoners report to the Public Safety Group Supervisor.

Name: Phone Number:

Reception Centre Location:

Phone Number: ____

Revised

elephone

B3 Resident Contact Log

			Core Emergency Response Plan
Date:		Responder Name:	
Page	of	Responder Position:	Responders Phone No.:

		440.00000000000		Number	of people	Assistance or	
Time	Resident name	Resident ID	Shelter / Evacuate	Inside	Outside	transportation required?	Comments
			O Shelter O Evacuate			O Yes O No	
			O Shelter O Evacuate			O Yes O No	
			O Shelter O Evacuate			O Yes O No	
			O Shelter O Evacuate	9		O Yes O No	
			O Shelter O Evacuate			O Yes O No	
			O Shelter O Evacuate			O Yes O No	
			O Shelter O Evacuate			O Yes O No	
			O Shelter O Evacuate			O Yes O No	
			O Shelter O Evacuate			O Yes O No	
			O Shelter O Evacuate			O Yes O No	
			O Shelter O Evacuate			O Yes O No	
			O Shelter O Evacuate			O Yes O No	

B6 Early Notification / Voluntary Evacuation Phone Message

Before calling, determine a safe evacuation route for the residents to travel, away from the emergency hazard area, upwind if possible, towards the reception centre.
Hello, this is <u>(your name)</u> calling from <u>(company name)</u> . Is this the <u>(name of residence / business)</u> at <u>(telephone number)</u> ?
(Company name) is responding to a (potential) emergency at (location) in your area.
You are in no danger at this time. All efforts are being made to resolve the problem and this phone call is only to inform you and provide you with an early notification.
To help us understand and your immediate needs we need to know:
How many people are at your location now? (Adults) (Children)
Do you wish to leave your residence at this time?
IF YES Please travel in a a <u>north / east / south / west</u> direction to our reception centre located at:
IF NO Please standby for further contact. Please do not use your telephone for outgoing calls as this may prevent us form contacting you with updated information or when the problem has been eliminated.
If you have urgent questions, please contactat(telephone number)
Thank you for your cooperation.

(Pass on all information regarding this call to the Public Safety Group Supervisor immediately)

ICS 214 Activity Log

				Core Emergency Response Plan
Incident Name	e:			
Date / Time In	iitiated:			
Prepared by:			Position / Title:	
Personnel As				
	Name	ICS Pos	sition	Location
A adicide I am				
Activity Log Time			Actions	
Time			Actions	



Core Emergency Response Plan

Initial Response:

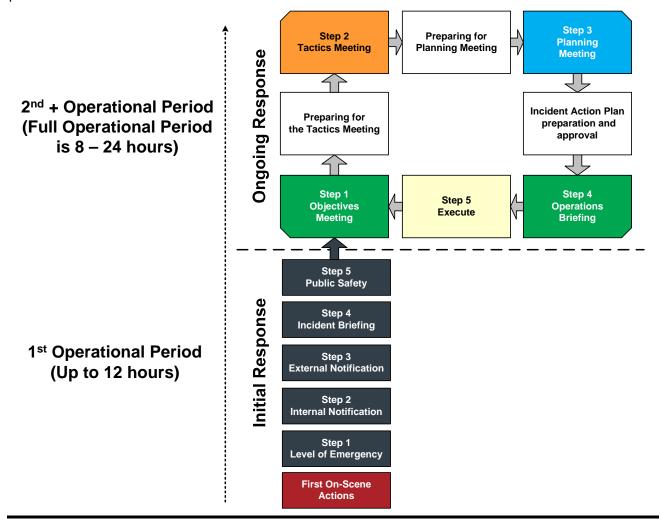
All incidents begin with the initial response (reactive phase) during the first operational period. At the onset of an emergency response an Initial Emergency Report (A1) Form is completed to determine the severity of the emergency and extent of the response. 95% of emergency responses begin and end in the first operational period.

After response personnel ensure their own personal safety by following the First On-Scene Actions, the Five Step Initial Response Guide, and associated tools, provide a structure for the Incident Commander to formulate a response and outlines the steps (key considerations) that need to be addressed and readdressed when evaluating the incident and associated emergency response.

Ongoing Response:

An ongoing response (proactive phase) is required for an extended emergency response that spans over multiple operational periods and revolves around establishing the objectives, strategies, and tactics for the next upcoming operational period. 5% of incidents require an ongoing response, but once engaged emergency responders will circulate through this cycle multiple times.

After the initial response has been completed, the Five Step Ongoing Response Guide and associated tools provide a cycle to plan the next steps of the emergency response. This continual cycle provides a structure for the Command Staff and General Staff to complete the Incident Action Plan (IAP) and associated documents. The ongoing response cycle and an associated IAP must be completed for each operational period until the incident is stood down.

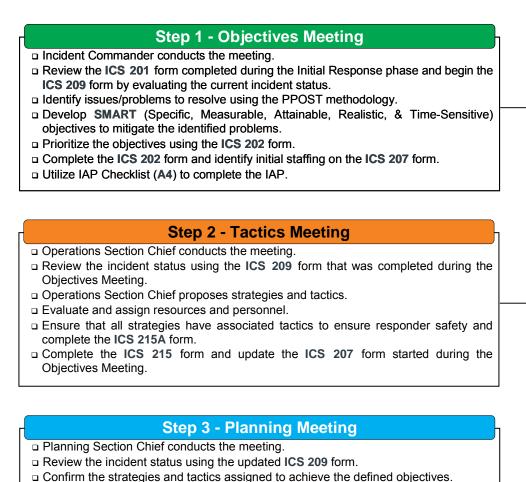


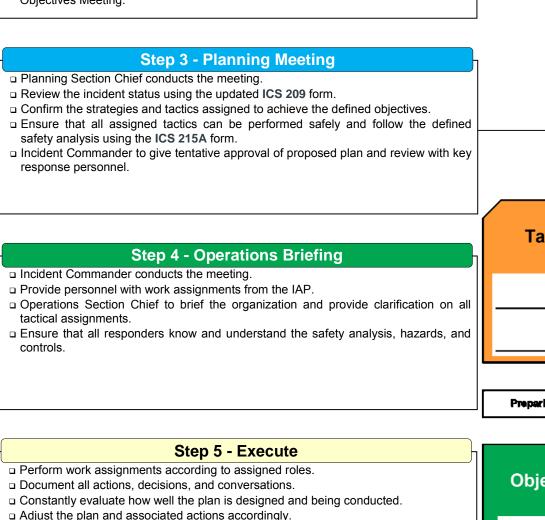
Section 2: Ongoing Response



Core Emergency Response Plan

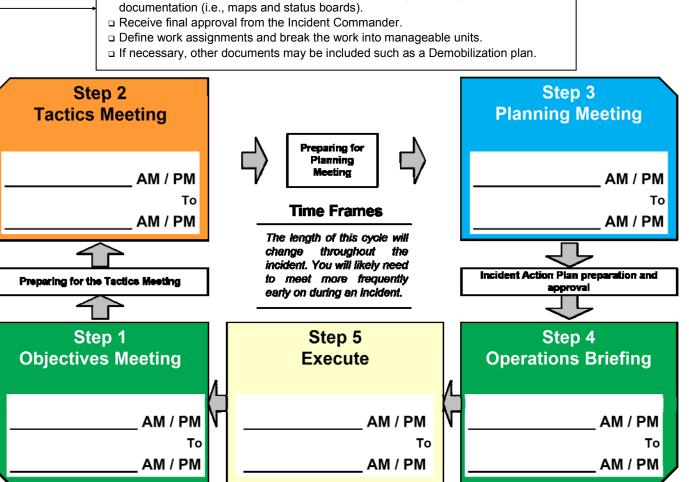
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□ Identify additional objectives for the upcoming operational period.

□ Schedule next Objectives Meeting if applicable.



Prepare for Tactics Meeting

□ Outline work assignments and develop an operations organization chart using the

□ Begin to prepare a safety analysis once all hazards have been identified using ICS

Prepare for Planning Meeting

Incident Action Plan Preparation and Approval

□ Produce a coordinated and sustainable Incident Action Plan using the IAP Checklist

(A4), ICS forms 202, 207, 209, 215, 215A, and gather any additional incident

□ Gather any additional incident documentation (i.e., maps and status boards).

Develop draft strategies and tactics for each defined objective.

□ Identify future tactical plans to optimize the Tactics Meeting.

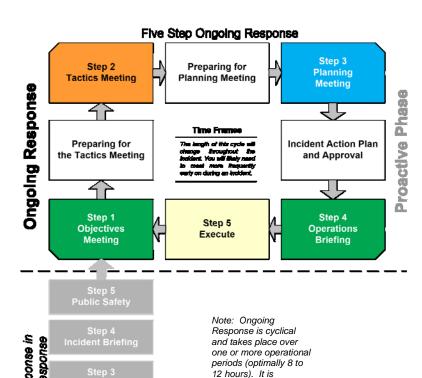
□ Review and update the ICS 209 form.

Confirm availability of resources and locations.

Prepare all information for review at the Planning Meeting.

ICS 207 form.

215A form.



designed to outline the Incident Action Plan for the next operational

period

2 2

Five Step
Ongoing
Response
Guide



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Objectives Meeting



Owner: Incident Commander	Date:		Time:			
Roles he	low will attend	d only if designate	d and available			
Attendees:	ion min accome	a only ir doorginate	a ana avanasio			
☐ Incident Commander:		□ Planning 3	Section Chief:			
☐ Deputy Incident Commander	r ar		Section Chief:			
☐ Operations Section Chief:		☐ Finance/A	dmin. Section Chief:			
☐ Planning Section Chief:		☐ Safety Off	icer:			
☐ Liaison Officer:		☐ Other:				
☐ Information Officer:		☐ Other:	☐ Other:			
Summary:						
 Have a completed ICS 202 for Establish objectives and priorit Begin an ICS 209 Incident State Begin identifying all required rown Begin addressing the Incident Schedule and prepare for the Town 	ies for the upco tus Summary r bles on the ICS Action Plan Ch	oming operational p eport. 3 207 form. necklist (A4).				
Resources:	•					
Agenda Items:						
☐ Status Update and review the	Incide	nt Briefing form.				
☐ Determine incident priorities. R	eference the P	POST methodology	·.			
mitigate the incident.	•	•	al and long-term challenges required to			
☐ Determine the incident respons must be (Specific, Me		nd complete and nable, Realistic, & T	Incident Objectives form. They ime Sensitive).			
☐ Identify initial staffing requirement		filling out the	Incident Organizational Chart.			
☐ Identify and select incident sup						
☐ Review the incident objectives on the IAP.	for the next op	erational period so	your management team can begin work			
☐ Document the incident status to	o relay to all re	sponding personnel				
Key Points:						
Ensure that the meeting is defined in the meeting is defined in the meeting is defined in the meeting in the meeting in the meeting in the meeting is defined in the meeting in the m	ocumented / r	ecorded. (Utilize th	ne back side of this page.)			
 Define the hours of work and of 	perational peri	od.				
Utilize Incident Action Plan Checklist (A4).						
Identify constraints and limitation	Identify constraints and limitations.					
Clarify any staff roles and resp	onsibilities.					
Determine expectations of the	team for how a	all communications	are to be made.			
Discuss and agree on process and sensitive information.	issues such as	s resource ordering	cost accounting, operations security,			
Continue to develop tasks for 0	Command and	General Staff.				
Agree on division of command	workload, suc	h as press and ager	ncy briefings.			

Objectives Meeting



Notes:

Tactics Meeting



Owner: Operations Section Chief	Date:		Time:				
	ill attend only	, if design	ated and available**				
Attendees:							
☐ Incident Commander:			Section Chief:				
☐ Deputy Incident Commander:☐ Operations Section Chief:			s Section Chief: 'Admin. Section Chief:				
☐ Planning Section Chief:		☐ Safety O					
☐ Liaison Officer:		☐ Other:					
		☐ Other:					
Summary:							
 The objectives of this meeting are to: Define tactics, work assignments, Meeting. Have completed ICS 215 and 215 Update the ICS 207 Incident Orga Refer to Incident Action Plan Chee Schedule and prepare for the Plan 	and resources to A forms agreed anization Chart. cklist (A4) and co	upon by all at	ttendees (Command and General Staff).				
Resources: ICS 209, 215, 215		cklist (A4)					
Agenda Items:							
☐ Review ICS 209 Incident Status S	ummary.						
☐ Review incident objectives.							
☐ Define tactics to complete objective	es set out during	the Objective	es Meeting.				
☐ Provide an operational update and	l identify tactics t	o deal with in	ncident.				
☐ Identify roles and responsibilities t	hat have to be pe	erformed to in	mplement tactics.				
with ICS 215 assignments.			art, check span-of-control, and match up				
 ☐ Identify work assignments ☐ Identify resources requirements ☐ Identify overhead staffing need ☐ Identify specialized equipment 	s to achieve each s to support each and supply need	n work assign n work assign s for each wo	nment				
☐ Specify reporting times and location for personnel Complete the Incident Action Plan Safety Analysis, ICS 215A. ☐ Identify potential hazard types ☐ Identify mitigations for associated hazard types							
☐ Identify support facilities and locati	ions.						
Key Points:							
Ensure that the meeting is docu	ımented / record	ded. (Utilize	the back side of this page.)				
Review planned actions against ir							
Utilize a map or chart to depict the operational areas, support facilities, and any key information.							
Discuss any applicable open action items.							
Consider contingencies and secondary options.							

Tactics Meeting



Notes:	
Notes.	

Planning Meeting



Owner: Planning Section Chief	Date:		Time:
Roles below w	vill attend only i	f designated	l and available
Attendees:			
☐ Incident Commander:		Planning Sec	tion Chief:
☐ Deputy Incident Commander:			
☐ Operations Section Chief: ☐ Planning Section Chief:		☐ Finance/Admin. Section Chief: ☐ Safety Officer:	
☐ Liaison Officer:		☐ Other:	
☐ Information Officer:	Other:		
Summary:			
 The objectives of this meeting are to Finalize an Incident Action Pla strategies outlined from the previous Schedule and prepare for the Op 	in with the necess ous command meet		ed on the objectives, tactics, and
Resources:			
Agenda Items:			
☐ Review Incident Action Plan forms	s (, and).
☐ Review Command's incident obje	ctives, priorities, ded	cisions, and dire	ection.
☐ Provide briefing on current situation		k, weather forec	ast, and incident projections.
 ☐ Operations Section Chief provides ☐ Current operations. ☐ An overview on the propose commitment, contingencies, o 	sed plan including		cs or work assignments, resource
			ities, and operational objectives are
development.	llines to appropriate	staff members	s to assure timely and effective IAP
Key Points:			
Ensure that the meeting is doc	umented / recorde	d. (Utilize the b	pack side of this page.)
Review IAP Checklist () to ens	sure that all critical m	naterials have b	een accounted for in the IAP.
Planning Section Chief brings me	eting to order, cove	r ground rules,	and review agenda.
Planning Section Chief requests	tacit Command appi	roval of the plar	as presented.
Planning Section Chief reviews a objectives.	nd validates respon	sibility for any o	pen actions and management
Planning Section Chief conducts and commitment to the proposed		mand and Gene	eral Staff to solicit their final input

Planning Meeting



Notes:	

Operations Briefing



Core Emergency Response Plan

Owner: Incident Commander	Date:	Time:
Roles below w	ill attend only if	f designated and available
Attendees:		
☐ Incident Commander:		On-Site Group Supervisor
☐ Deputy Incident Commander:		Public Safety Group Supervisor
Operations Section Chief:		Air Monitor Team Lead
☐ Planning Section Chief: ☐ Liaison Officer:		
☐ Information Officer:		
☐ Planning Section Chief:		
☐ Logistics Section Chief:		
Finance/Admin. Section Chief:	<u> </u>	Other:
☐ Safety Officer: ☐ Staging Area Manager:		Other:
Summary:		1 Other.
The objectives of this meeting are to:		
 Review a summary of the incident 		onders.
Relay objectives, tactics, and strategy	•	
Reinforce/relay the safety message		
Assign roles & responsibilities and		nders to accomplish.
 Execute the response. 		
	es Meeting and ider	entify potential problems/issues to address in the
next operational period.		
Resources:		
Agenda Items:		
☐ Planning Section Chief briefly wall	ks through the IAP c	components and makes changes as needed.
☐ Operations Section Chief conduct	s roll call of the Ope	eration Section Supervisors and provides a briefin
on emergency response.		
	supervisory personne	nel on their assignments along with clarification o
any of their issues and concerns.		
☐ Safety Officer covers major safety		
Logistics Section Chief covers log medical, etc).	gistical support of op	perations (communications, supply, transportation
☐ Finance / Admin. Section Chief co	vers time & cost trac	cking, procurement, and compensation process.
☐ General Staff to cover issues appl	icable to Operations	s Section personnel.
Key Points:		
Ensure that the meeting is docu	ımented / recorded	d. (Utilize the back side of this page.)
		rules, agenda, and conducts roll call of Command
Establish a briefing and message for all responders.		
Review pre-determined public and	•	
Planning Section Chief solicits final		

Operations Briefing



Core Emergency Response Plan

Notes:	



Section 3: Communication & Media

Guiding Principles and Approach	1
Media Communications	2
Preliminary Media Statement	3





Guiding Principles and Approach

Ovintiv will be responsible, understanding and compassionate to the needs of stakeholders directly impacted by the crisis, but place the following priority on communications that support the safety of:

- o people (i.e. landowners, community residents and staff)
- the environment
- o property/business

Stakeholders impacted by a crisis should be notified in a timely manner about potential risks so they can make informed decisions about potential personal implications

Communications Response by Severity

Ovintiv's system for assessing incident severity is outlined in the Emergency Preparedness Standard of Ovintiv's environment, health and safety (EH&S) management system, Ethos. This system aligns with the system used by the BC Oil and Gas Commission.

The following chart outlines the four severity levels and the suggested corresponding communications response. In the event that reputational impacts/risks warrant an elevated communications response, consider revising and escalating the communications response.

Severity	Communications Response/Strategy
Alert	Communications may heighten media and social media monitoring to include keyword searches relevant to the situation. Key messages and/or standby statements will be reviewed and updated. Communications may not be immediately aware of an Alert-level incident.
Level 1	Communications will heighten media and social media monitoring and be prepared to respond to inquiries from the public, concerned community stakeholders and social and conventional media. Key messages and a holding statement will be developed if required and distributed as necessary.
Level 2	Ovintiv will proactively engage with impacted stakeholders and local and/or regional media if interest or awareness is evident. Any decision to issue a news release or hold a news conference for a Level Two incident will be made in consultation with the senior management team (or under the direction of the appropriate regulator). Mainstream and social media is regularly monitored.
Level 3	Ovintiv will proactively communicate with all stakeholders (both internal and external) and all local, provincial, national or international media as appropriate. Ovintiv may actively distribute information to the media over the wire and may consider holding formal press conferences. Mainstream and social media is constantly monitored (regulatory requirements vary).



Media Communications

Note: Media updates must be generated and released as significant developments occur. Ovintiv will coordinate media releases whenever possible with the regulator prior to publication to ensure consistency and accuracy of information.

Under most regulatory jurisdictions, the following information must be released to the general public as soon as possible during an incident:

- type and status of incident,
- location and proximity of the incident to people in the vicinity,
- · areas impacted by the incident,
- effects the incident may have on people in the vicinity,
- actions the general public should take if they experience adverse effects,
- description of the products involved and their short- and long-term effects,
- public protection measures to follow, evacuation direction, and any other emergency response measures to consider,
- actions being taken to correct the situation and time period anticipated, and
- contacts for additional information.

The effectiveness of Ovintiv's media relations during an emergency depends on the co-operation and mutual support of three components:

- Only the field-based Incident Commander and the Media Spokesperson are authorized to release information to the media:
- The Incident Commander and the Media Spokesperson should confirm facts prior to either spokesperson releasing information; and
- Ovintiv personnel should co-operate with reporters by referring them to the Incident Commander or the Media Spokesperson.
- Do not wait until you are contacted by the media to react to their inquiries. By preparing in advance, the company will appear to be organized, aware, and actively responding to the situation. The essence of effective media management is preparation in advance of any media contact.
- It is important when contacting the media with a news release that you do not favour one media
 organization or agency over another. To minimize the chances of creating a prejudicial situation, deal
 solely with major umbrella press agencies.
- If media representatives are not provided with the basic information, it can be assumed that they will fill the gap with material from less reliable sources.

Be aware at all times that it is possible for the media or others to be monitoring your radio, cellular phone, or telephone conversations.



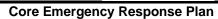
Preliminary Media Statement

Date:	
Time:	

We can confirm an incident occurred at Ovintiv's [insert facility/site]. Our team in the field is actively responding and we are gathering more information about the nature and severity of the incident. An Ovintiv spokesperson will provide more information when it is available.

You can contact our media spokesperson at (403) 645-4747.







Section 4: Emergency Response Procedures

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	cy Response Plan
Wildfire Response	
Transportation Incidents	1
First On-Scene Transportation (Road, Rail, Marine) Incident Flowchart	1
Loss, Theft or Unlawful Interference Reporting Flowchart	2
Motor Vehicle Accidents	
Emergency Response Assistance Canada (ERAC) Plan	4
CANUTEC – Canadian Transport Emergency Centre	4
Dangerous Goods References	5
TDG Reportable Quantities	5
Rail Car Identification Chart	7
Road Trailer Identification Chart	9
Table of Markings, Labels and Placards	11
TDG 30 Day Follow-up Report Form	13
Weather and Natural Disasters	1
Earthquake	2
Floods	4
Thunderstorm and Lightning Safety	6
Tornados	7
Winter Storms: Blizzards, Freezing Rain, Heavy Snow, Blowing Snow	7
After a Disaster	9
Security Incidents	1
Responding to threats	1
Bomb threats	2
Suspicious packages	5
Trespassing	7
Vandalism	8
Terrorism	8
Cyber-Attacks	9
Animal Encounters	1
First Responders to Animal attacks	1
Bears	1
Cougars	4
Large Hooved Animals (Ungulates)	6
Rattle Snakes	7
Wolves	8
Bees and Wasps	9
FniPens	10

Public Protection Measures

There are three primary public protection measures that are used to ensure the safety of the public in the event of an incident: shelter-in-place, evacuation, and ignition.

All members of the public within the EPZ will be given the *Shelter-In-Place or Urgent Evacuation* message depending on the best public safety action for the circumstances. Ovintiv's Incident Commander and Public Protection Chief will make this determination.

Shelter-In-Place

Shelter-in-place is considered the primary safety measure when the hazard is of a limited duration or the public would be at a higher risk if evacuated. Sheltering within a building creates an indoor buffer to protect affected individuals from higher (more toxic) concentrations that may exist outdoors. The goal is to reduce the movement of air into and out of the building until either the hazard has passed or other appropriate emergency actions can be taken (such as evacuation).

Sheltering indoors is a viable public protection measure in circumstances when:

- There is insufficient time or warning to safely evacuate the public
- Residents are waiting for evacuation assistance
- The release will be of a limited size and /or duration
- The location of the release has not been identified
- The public would be at a higher risk if evacuated
- Escape routes traverse the hazards

Refer to either **page 4** or **Section 6: Forms** for the Shelter-in-Place Phone Message script to be used when contacting residents. Residents advised to shelter-in-place will be notified if additional measures are required, and when it is "all-clear".

Evacuation

For long-term releases, evacuation is preferred to sheltering if public safety can be assured during the evacuation process.

Evacuation is a viable public protection measure in circumstances when:

- The location of the plume is known and safe egress routes can be assured
- The release will not likely be contained in the near future
- · Visibility and road conditions are good
- The residents clearly understand their directions

The licensee is expected to monitor the air quality along the edge of the EPZ to determine if sheltering or evacuation criteria have been met outside the EPZ.

If evacuation is implemented it will commence, beginning with residents, transients and other area users in locations that are downwind and/or in close proximity to the emergency site, and special needs residents will also receive priority notification if they have not been already evacuated at a Minor Emergency.

Appropriate methods must be utilized to ensure transients (hunters, trappers, recreational users, non-resident landowners, etc.) within the EPZ are located and evacuated. When a tactical evacuation has taken place, the appropriate local authority must be notified.



Evacuation, continued

Residents should also be evacuated during ongoing emergency flaring or burning if their health and safety could be affected by the operation.

If an emergency requires area isolation and/or evacuation, the Public Protection Chief will contact the principals of area schools and the appropriate area School Bus Coordinators to advise them of roadblock locations and affected students. Telephone numbers are listed in the applicable site sections.

Special procedures may be required for evacuating large industrial operations and/or public facilities. If large numbers of people are involved, the permit holder must address assistance with transportation. Refer to the AREA SPECIFIC INFORMATION SECTION (white tabs) for information regarding transportation (e.g., providing school buses) or other changes in the normal notification procedures.

Outside the Emergency Planning Zone

Ovintiv is prepared to protect the safety of all area users by evacuation, shelter-in-place or possibly ignition of the release. Ovintiv's Emergency Response Team will coordinate their public safety actions with the Local Authority for any affected area beyond the EPZ.

In BC, the Municipality/Local Authority and/or the EMBC is responsible for residents outside of the EPZ.

Notification and Evacuation Requirement for Areas outside the Emergency Planning Zone

Hydrogen	Sulfido	Gas	/U_C1
nvarouen	Sumae	Gas	(D23)

In BC:

1 – 9 ppm Individuals must be informed of the concentrations and advised to leave.

All other individuals should consider leaving the area and seek medical

advice if health symptoms develop.

Exceeds 10 ppm Immediate evacuation of the area must take place or the release must be

ignited.

Sulphur Dioxide Gas (SO₂)

In BC:

1 ppm Voluntary evacuation

2 ppm Evacuation of the area should begin 5 ppm Mandatory evacuation of the area

Note: The Sulphur Dioxide SO₂ gas levels are a guide only. Should a person experience increasing

difficulty due to the presence of Sulphur Dioxide gas, that person should be advised to leave the area

and consult a physician.

Natural Gas Liquids (NGL)

If there is **any** detectable level of combustible gas that poses a threat of toxicity, explosion, or fire in an unevacuated area.



LEVEL 1 EMERGENCY MESSAGE - NOTIFICATION/VOLUNTARY EVACUATION

If you reach a	voice mail message, please re	ead the following scri	pt:
	[your name] of Ovintiv call [time, date] with an importa		
Please o	contact me at	[number] when	you receive this message."
Hello, is this the	(name)	_ residence at	? (phone number)
This is _ Please listen carefull	(your name) calling from (y.	Ovintiv with an importa	int safety message.
	periencing operational difficult medial operations are underw		is time, there is no danger to your
As a precaution , you	and your family have the opti	ion of evacuating you	ur residence at this time.
Do you wish to eva	cuate at this time?(Ye	s/No)	
-		-	Reception Centre located at the
	rintiv representative will greet	(hall, cent	re, office, hotel).
All OV	How many persons are	-	•
	Do you have transportar		
	Will you require assista	•	
	ce is need, advise them to close you will send someone to pick th	their windows and do	
Action	this immediately.		
IF <u>NO</u> : How ca	n we reach you to keep you u	pdated?	
Please	e let us know if you decide to l	eave the area.	
Do you understand	these instructions?	(Yes / No)	
Again, my name is _	(name)	and my number is	
	(name)		(phone number)





LEVEL 1, 2 or 3 EMERGENCY MESSAGE - STAY IN SHELTER

If you reach a voice mail message, please r	ead the following script:
"This is[your name] of Ovintiv [time, date] with an im	calling from the[facility/office name] at portant message for[resident name].
Please contact me at	[number] when you receive this message."
Hello, is this the	residence at?(phone number)
This is (your name) calling free Please listen carefully.	om Ovintiv with an important safety message.
	he area. All efforts are being made to solve the problem.
For your safety it is essential that you gather exsheltered indoors.	veryone in the house, close all windows and doors and remain
How many people are in your house right now? Is there anyone outside who you cannot easily of	contact?(Yes / No)
If <u>YES</u> : Determine the location of anyone ou that you will send someone to find them as so	
Please:	
Close (and keep closed) all your wir	ndows and doors.
 If possible shut off any exhaust fans stove fans, bathroom vents, close 	, such as: thes dryer, air conditioner or built-in vacuum systems
 Extinguish the fire in your fire place. 	
 Go to the interior of your house awa 	y from any windows or doors.
 Do not leave your house. 	
 Avoid using your telephone so that v 	we can contact you again with additional information.
Do you understand these instructions?	_ (Yes / No)
I will call you back with an update within an hou me.	r. In the meantime, if you have urgent questions, you can call
Again, my name is	and my number is (phone number





LEVEL 2 or 3 EMERGENCY MESSAGE - URGENT EVACUATION

If you	ı reach a voice	mail message, plea	se read the following s	script:
"This				[facility/office name] at [resident name].
	Please cont	act me at	<i>[number]</i> whe	n you receive this message."
Hello, is this	the	(name)	residence at	? (phone number)
This is Please listen		our name) calling fro	m Ovintiv with an import	tant safety message.
For your saf	fety, you must			on Reception Centre located at the v representative will greet you there
and address y	your questions. ne outside who y	/ou <u>cannot</u> easily co	ontact?(Yes / No e outside and assure th	o)
<u>120</u> .	that you will	send someone to fi	nd them as soon as po y by notifying your Su	ossible.
Do you have If NO:	Advise them t Assure then		ws and doors and rem someone to pick then	
Do you under Are you leavi	rstand these inst ng immediately?	ructions? (Ye (Yes / No)	s/No)	
Again, my na	me is	(name)	and my number is	(phone number)
Thank you for	r your cooperation	on.		





Public Protection Measures, continued Ignition

In conjunction with shelter-in-place and evacuation strategies, the release may be ignited at the source in order to reduce public exposure to the hazard. The combustion of the hydrogen sulphide (H_2S) results in the produced sulphur dioxide (SO_2) being carried high into the atmosphere allowing additional time for the public to safely evacuate. If an immediate threat to human life exists and there is not sufficient time to evacuate the hazard area or the Emergency Planning Zone (EPZ) – whichever is bigger – the On-Site Group Supervisor is authorized to ignite the release.

Note: Only those personnel trained in ignition procedures can determine if ignition is required and operate the ignition equipment.

Ignition of an HVP product release should occur only after the position of the plume has been established, after careful deliberation, and when safe to do so.

Until such time that a decision has been made to ignite a release, the licensee should take steps to minimize any chance of unplanned ignition in the area.

When making the decision to ignite, the licensee must take the following into consideration:

- the increased risk(s) of delayed ignition,
- whether the perimeter of the hazard area has been established,
- whether the public has been evacuated from the area.
- whether ignition will worsen the situation by endangering the public or the environment or damaging the equipment used to control the product,
- · whether wind direction has been established and is it being continually monitored, and
- whether the possibility of an explosion has been assessed (i.e. obstructions or regions of congestion within the perimeter of the dispersing vapour cloud).

If at all possible, the On-Site Group Supervisor must consult with higher authority individuals within the company (ideally the Operations Section Chief, Incident Commander, EOC Director, etc.) and the appropriate government regulator.

Road and Airspace Closures

The company should receive authorization from local authorities or the RCMP before establishing roadblocks on public roads. The company must contact the RCMP and the transportation authority to have one-, two- or three-digit highways closed. However, if the safety of the public is in jeopardy, the company must be prepared to quickly restrict access to the area before contacting these agencies.

If warranted, the regulatory agency can issue a Closure Order that provides legal authority to close the area. The local authority may, if warranted, declare a Local State of Emergency. This grants the local authority special powers to do such things as road closures or declare mandatory evacuation.

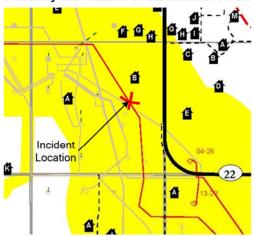
The public must also be prevented from flying into the airspace above a gas release. It may be necessary for NAV CANADA to issue a Notice to Airmen (NOTAM) to advise the pilots of restrictions in the airspace above the EPZ or to close the airspace for a certain radius from the release (a no-fly zone). NOTAMs or closure of airspace may be requested by the regulatory agency at a level 2 or level 3 emergency.



Public Protection Measures, continued

Establishing and Isolating a Perimeter

1. Identify the location of the incident on the map:



3. Determine the wind direction

Look for wind direction indications such as flags, windsocks, direction of smoke, etc..

Draw the wind direction on the map with an arrow.



5. Isolate the hazard area with roadblocks

If any residences exist between the optimal roadblock location and the EPZ, expand the EPZ to include those



2. Determine the size of response zones (hazard areas):

EPZ - Emergency Planning Zone

IIZ - Initial Isolation Zone

PAZ - Protective Action Zone

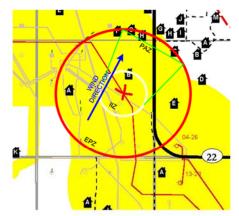
You can find this information:

- a) Labeled on the map
- b) In the site specific tables
- c) As the yellow area on the map

If the incident is at a facility or if you have not yet confirmed the exact location of the incident, you must use the largest EPZ for the area. The largest EPZ for the area is shown in yellow on the map.

4. Draw the zones on map:

- a) EPZ The entire hazard area
- o) IIZ Those closest to the hazard
- c) PAZ Those downwind of the hazard



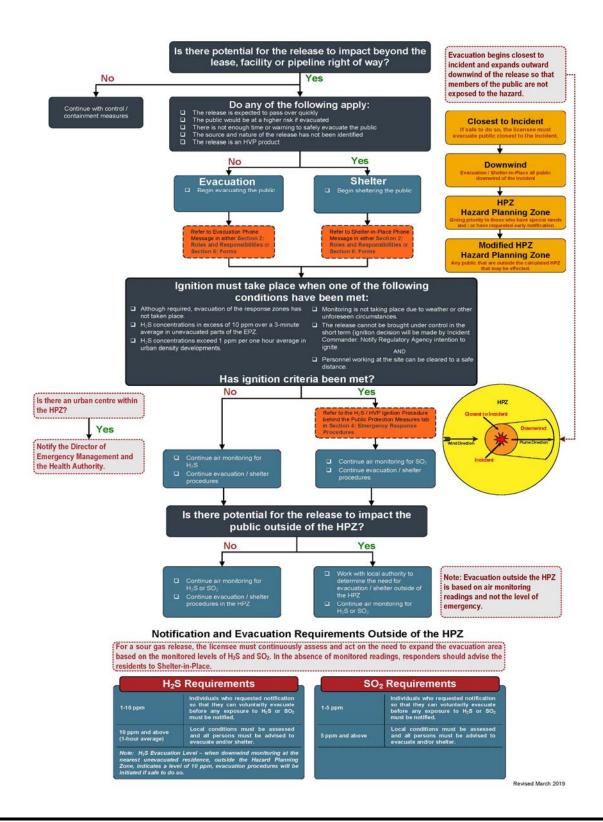
6. Following the appropriate provincial public protection measures chart, initiate public safety activities.

Residents in the IIZ are closest to the hazard and are the most at risk of being adversely affected.

Residents in the PAZ are the second group to be evacuated / sheltered in place as being downwind of the hazard puts them at a higher risk than the rest of the residences in the EPZ that are upwind or crosswind from the hazard.



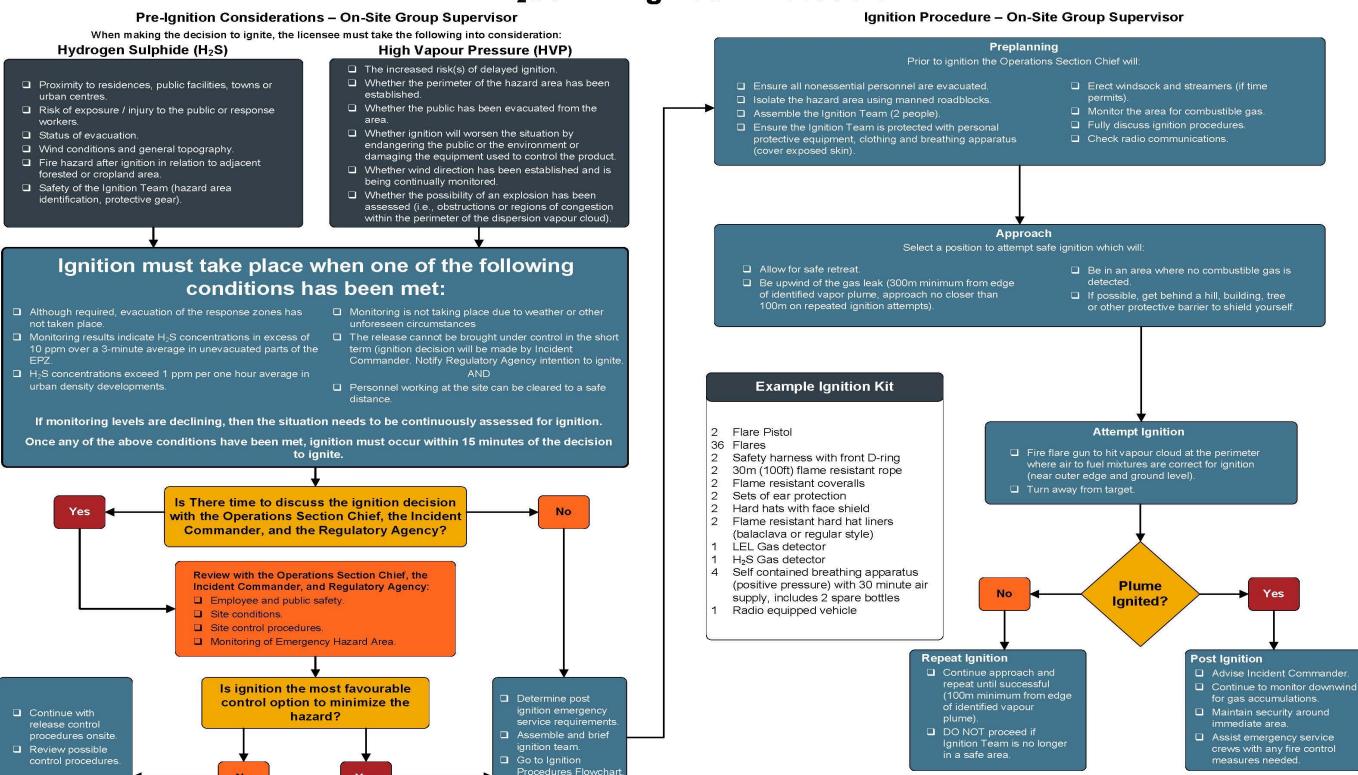
Public Protection Measures, continued Public Protection Measures Flowchart





Public Protection Measures, continued

H₂S / HVP Ignition Procedure



Revised March 2019





Upstream Petroleum Industry – Spill & Release Reporting Requirements

All Spills must be reported to your Ovintiv EHS Advisor (IMS)

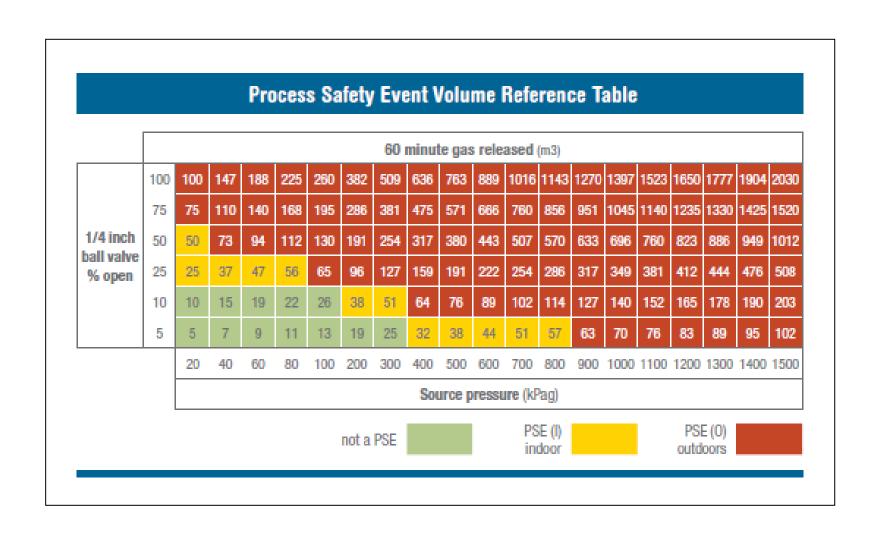
	*** If the released	Minimum Report	-	minimum quantity	
,		British Columbia (see Note 2) All releases must be reported, regardless of a minimum reportable quantity, if the releas "polluting substance" is causing "pollution".		a minimum reportable quantity, if the release of a	
Product		On-Site	On-Site	Product	
Conden I Any/A	ed products (Crude Oil, sate), Drilling Mud (all), Emulsions, Produced Water Il unrefined products, ilfield Wastes (See Note 6)	2 m³	Unrefined products (Crude Oil, Condensate), Drilling Mud (all), Emulsions, "Waste" Lube Oil, "Waste Glycols, Diesel Fuel, Gasoline <u>and</u> Otl Refined Flammable Liquids <i>(Class 3</i> Methanol		
	Gasoline <u>and</u> Other Refined hable Liquids <i>(Class 3)</i> Methanol	200 L	200 L	Produced Water	
	Fresh Water	May be reportable depending on volumes/mechanism of failure (e.g. berm or AWSS breach) impacts (sediment or erosion offsite) and whether the water was tested prior.	Unintentional release of 10 m3 or if there are impacts (sediment or erosion offsite) and whether the water was tested prior.	Fresh Water	
Pipeline Inci	idents (leak, break, contact)	Any Licensed Pipeline	Any Permitted Pipeline	Pipeline Incidents (leak, break, contact)	
Natural Gas	(Flare and Vent) -				
Natural Ga	intentional venting ref	ease caused by a leak or break. For other fer to Directive 060 section 8. (See Note 5)	if breakage in a pipeline or fitting opera	0.012 E ³ M ³) ted above 100 psi and results in a sudden & of natural gas. (See Note 7)	
Permit/ Appr Condition	ns	Report as per approval	Report a	as per permit	
Solution G Flaring		ctive 060. Potential inlet reductions and R and resident) after 4 hours via DDS.	Notify the OGC if non-routine floring ave	nt exceeds 10 e3m3. For resident notification	
Temporary gas Facili flaring	tv Tel Table 2 01 Dilec	tive 060. Notifications required (AER and nours or greater than 30 E ³ M ³ via DDS.		Flaring and Venting Reduction Guidelines	
Report to:					
Product Releases a incidents Releases du transpor (Endanger could endar public safe	Releases during tran local Police and Written report withi regulated product rele consignor of the dange of the road vehicle; an	rgy Regulator 1-800-222-6514 ely to above. A written 7-day report may be pipeline or off-site release to AER and notify landowner. sport should be immediately reported to 1-800-272-9600 (AB Transportation) in 30 days to Transport Canada for TDG eases. TDGR also requires reporting to the erous goods; the owner, lessee or charterer id, for an accidental release from a cylinder	Section 4.8. Minor incidents must be submitted within 24 hours by electronic submission through KERMIT. Form D (Post Incident Report) required for all Level 1 or greater emergencies or any pipeline incident within 60 days Emergency Management BC (EMBC) 1-800-663-3456 Written report may be required by the MOE. Written report within 30 days to Transport Canada for TDG regulated product releases. TDGR also requires reporting to the consignor of the dangerous goods; the owner, lessee or charterer of the road vehicle;		
that has suffered a catastrophic failure, CANUTEC at 613-996- 6666. Report to Environment Canada 1-780-499-2432 for any release of a deleterious substance directly or indirectly (including through groundwater) into water frequented by fish. **Regulated Regulated Releases** Regulated Releases** Releases** Releases** Releases** Report to Environment Canada 1-780-499-2432 for any release of a deleterious substance directly or indirectly (including through groundwater) into water frequented by fish. **MiOa} æaiæO} ^!*^AÜ^* æ[! (ÔOÜ) regulated pipelines require immediate reporting of all incidents as defined in the Onshore Production Regulations (OPR) B as further described in the ÔOÜ Event Reporting Guidelines. Releases of LVP in excess of 1.5 m3, sweet natural gas or HVP in excess of 30 103 m3 or any uncontrolled release of sour natural gas requires immediate reporting via the Transportation Safety Board (TSB) Hotline at (819) 997-7887 and through the Online Event Reporting System (OERS). Unauthorized activity such as ground disturbance, construction activity or nonauthorized vehicle crossings also requires immediate reporting. For any questions contact the Ovintiv Regulatory Compliance Group or for a copy of the ÔOÜ Event Reporting Summary. Radioactive releases to be immediately reported to any CNSC (Canadian Nuclear Safety Commission) office and a full report filed within 21 days. CNSC Western Regional Office 403-292-5181.					
Notes:					
1	building or secondary containm reported, regardless of minimal of or damage to the environme	It spill is reportable above the threshold quantity ent) while refined product spills must be into the reportable quantities, if the release has caused nt, human health or safety or property".	e environment – This is due to applicable act/ l, is causing or may cause an adverse effect.	regulation wording. All releases must be An "adverse effect" is defined as impairment	
2	In B.C.: All releases must be reported, regardless of a minimum reportable quantity, if the release of a "polluting substance" is causing "pollution". "Polluting substance" is any substance, whether gaseous, liquid, or solid that is capable of causing pollution, if it were to escape to air, or be spilled or escape onto land or into a water body. "Pollution" is the presence in the environment of substances or contaminants that substantially alter or impair the usefulness of the environment. Any fluid including hydrocarbons, drilling fluids, invert mud etc. which contain toxic substances must be reported at 5 L.				
3	Transportation refers to the TDG and means all handling, offering for transport, and transporting of dangerous goods, by any means of transport. Handling means oading, unloading, packing or unpacking dangerous goods in a means of containment for the purposes of, in the course of or following transportation, includes storage in the course of transportation also Including inside buildings and secondary containment. Transportation does not include by pipelines. Waste and TDG classification is variable. Refer to the product's MSDS to determine TDG classification; in particular amines and inhibitors can be a variety of				
4	classifications (i.e. corrosive, flammable etc.). Refer to the <i>Ovintiv Shipping Management Chart</i> for waste information. Some products may have to be reported by their secondary TDG classification (e.g. methanol). For Alberta refer also to the Table in Part 8, Section 8 of the TDG Regulations. For BC refer also to the Spill Reporting Regulations. Produced water, lube oil and hydraulic oil are not typically TDG regulated products unless it contains a regulated component(s).				
Additional AER immediate reporting requirements include: any fire where the loss exceeds 2 m3 of oil or 30 e3m3 of gas or fire caused by a flare stack or any event that causes the activation of a level 1 emergency or higher; also any unexplained loss or theft of oil or condensate exceeding 2 m3, any damage to or uncontrolled flow from a wellhead or any smoke emissions that may result in public concerns; also any gas release exceeding 30 e3m3 per Directive 60 Table 1 and Table 2 or any casing leak or failure; any contact leak or break in a pipeline; any leak in a pipeline during pressure testing. Also notify the AER of gas plant turnaround at least 24 hours in advance. Also note that venting is not considered an acceptable alternative to flaring and gas should be burned if the volumes and flow rates will support stable combustion. Venting should not result in an unacceptable fire or explosion hazard and should not result in off-lease odors (consult EHS staff to discuss whether odors require notification). Also note that all flared and vented volumes should be measured or estimated and reported to the AER via ACTS/Production Accounting if the volumes are greater than 0.1 e3m3					
AER definition of an oilfield waste is "An unwanted substance (by the generator) or mixture of substances that results from the construction, operation or reclamation of a well site, oil and gas battery, gas plant, compressor station, crude oil terminal, pipeline, gas gathering system, heavy oil site, oil sands site or related facility.					
Report to the OGC any damage or malfunction likely to cause spillage that could be a risk to the public safety or the environment including all pipeline incidents. Well control incidents should be reported to EMBC and the OGC directly at 1-250-794-5200. Spills and incidents that do not reach an emergency level 1, 2 or 3 (minor incident score 2 or less) also require reporting on the On-line Minor Incident Reporting system within 24 hours (Form A). Any level 1, 2 or 3 emergency incidents (including any pipeline related incidents) must be reported immediately to EMBC AND A Form D completed within 60 days.					

Any level 1, 2 or 3 emergency incidents (including any pipeline related incidents) must be reported immediately to EMBC AND A Form D completed within 60 days.



Spill Priorities:

- □ Establish site control
- □ Determine and control source of spill
- □ Contain the spill and prevent it from spreading
- □ Contact your supervisor
- □ Contact Environmental advisor
 - o Report to Regulator if required and coordinate cleanup
 - o Coordinate Waste handling, transportation and disposal
 - o Record and compile information/reporting regarding the spill
- ☐ Clean up spill
- Enter into IMS





Spill Response, continued

Spill Response Guidelines

This section provides basic hydrocarbon spill response guidelines. For greater detail, refer to the Western Canada Spill Services (WCSS) manuals, applicable Safety Data Sheets (SDS) and the Emergency Response Assistance Canada (ERAC) Plan. Refer to the Petroleum Industry Release Reporting Requirements chart at the beginning of this section to determine the TDG and Provincial Reporting Requirements for each class of chemicals (as classified by the TDG Hazard Classification System).

Initial Response Actions:

- Determine the Level of Emergency using the Assessment Matrix in Section 1: Initial Response.
- Determine spilled substance. If it can be classified as an LPG release, isolate the area to a minimum distance of 1600 meters (1 mile) and refer to the BLEVE portion of the fire / explosion section.
- Assess spill hazards and risks. Determine what PPE will be required.

Considerations:

- Are there any nearby public (workers, traffic, residents) that would need to be evacuated or diverted from the spill area?
- Is there a fire or explosion hazard? What is the ignition source?
- Is there H₂S or other toxins present? Are concentrations safe or is additional PPE needed?
- Are there any areas deemed hazardous? (Mark with flags)
- What are the ground and weather conditions? (Snow, gravel, sand etc.)
- Where is the location of the leak, the type of release and the volume released? Is it reportable? Has it been reported to the regulator?
- How long has the spill been taking place?
- Are air monitoring trailers required?
- Is the spill into a watercourse, watershed or a water body?
- Is the spill contained or migrating? Which direction? How far can it go?
- If the spill is not contained, determine and prioritize the containment points and methods to be used.
- What lands or water bodies may be affected? (Farm, livestock, brush, drinking water, etc.)
- How is it going to be contained and cleaned up?
- How to access the spill site, the source of the spill and recovery points?
- What equipment is required? Is oil spill equipment (oil spill co-op) required?
- Where can spill responders park so as not to interfere with spill equipment? (Minimize vehicular traffic as much as possible at the spill site.)
- Are there any residences in the area? Do they have water wells that could be affected?
- Should the spill site be cordoned off to prevent wildlife / livestock from entering?
- Will a media response be required?



Spill Response, continued

Control/Containment

- · Remove all sources of ignition.
- Stop the spill if safely possible (e.g. shut off pump, replace cap, tip drum upward, patch leaking hole). Use the contents of the nearest spill kit to aid in stopping the spill if it is safe to do so.
- Assess speed and direction of spill and cause of movement (water, wind and slope).
- Use contents of spill kits to place sorbent materials on the spill, or use shovel to dig to contain spill.
 Methods may vary depending on the nature of the spill.
- Prioritize and set up containment points.
- Where possible, prevent a spill from entering a watercourse.
- Have a contingency plan ready in case spill worsens beyond control or if the weather or topography impedes containment.
- Avoid excessive walking or driving on the spill area.
- Consider ground disturbance guidelines.
- Surface run off may have to be diverted from the spill site if wet conditions are present.
- Mitigate or eliminate any danger to life, health, the environment or property arising from the spill.
- Ensure the health and safety of the persons responding to the spill.
- Once containment has been achieved, recovery and clean-up operations begin immediately.
- Recover as much product and saturated debris as possible.
- Keep environmental disturbance to a minimum.
- Take steps to rehabilitate any land affected by the spill.
- Take steps to prevent the occurrence of a similar spill.

External Notifications

- Follow notification procedures outlined at the beginning of this section as per the applicable provincial Petroleum Industry Release Reporting Requirements chart.
- Contact the applicable spill service (as outlined in the table below) to determine the closest available spill equipment and towing requirements. See contact information below:

British Columbia	Western Canadian Spill Services (WCSS)	866-541-8888
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Spill Response, continued

Spill Control Points

Control points are pre-identified locations on watercourses that allow for the staging and deployment of oil spill containment and recovery equipment in response to oil spills that have occurred upstream of the control point. Control point selection is critical to an effective oil spill response and part of your risk assessment and development of site-specific emergency response plan information. For a detailed list of control points utilize the WCSS website (http://www.wcss.ab.ca).

An ideal control point should have:

- Quick access to the watercourse in all seasons, using clear ground, a road or a trail
- Adequate work space to conduct operations and to store required equipment with minimal need for clearing of brush and vegetation
- Sufficient space to deploy containment and recovery equipment quickly with minimal effort or obstructions (i.e. trees, rocks, steep banks, etc.) and minimal environmental impact
- Boat launch location(s) for boats assisting in containment and recovery operations.

Selection of control points with public access is preferred.

For control points on private property - landowner approval and necessary permits for emergency access should be obtained in advance.

Designated site specific control points need to be reviewed at least annually. Each control point site should be visited periodically to evaluate suitability and to ensure information is accurate and complete. Old unsuitable control points should be removed and new control points added, as a part of revisions to site specific information, as required. Control point listings should include a site description, site diagram, access description, landowner/occupant phone number, site suitability and any other information related to the site.

Action

Where a spill occurs, the person who had possession immediately before the spill shall take all reasonable and practical action. They should have due regard for the safety of the public, themselves, to stop and contain and minimize the effects of the spill.

Provincial oil and gas regulations require operators to take immediate steps to contain and clean up spilled upstream petroleum product. Upstream petroleum product refers to crude oil, salt water, emulsions, condensates, sour gas natural gas liquids and / or any combination of the materials listed that are generated during exploration and production activities.



Spill Response, continued

Recovery Techniques

There are two basic means of stopping the flow of petroleum products floating on a stream or river: a boom or a dam. If the stream or river if relatively large, booms are used. A dam may be constructed across the channel of a small stream with a low flow.

If a stream or river is to be boomed, the appropriate equipment should be obtained from the Local Spill Response Cooperative or mutual aid partners. Decisions must incorporate the following considerations:

- Width of stream or river to be boomed (where possible, the entire river width should be boomed)
- Allowable boom angle based on stream or river current and length of boom required
- · Anchoring methods for the booms
- · Methods to lay out and deploy a boom

If a dam is to be constructed across the stream, some allowance must be made for the flow of water past the dam. The Western Canadian Spill Services plan provides detailed information about oil spill containment and recovery.

Containment and Storage of Product

When commercial barriers are not suitable or available, particularly in remote areas, barriers must be improvised. Improvising depends on the materials at hand and the situation in which the spill occurred. In each case, the experience and innovative ability of the personnel at the spill site is needed for the successful containment of the oil spill.

Tank trucks, storage tanks or an earthen pit may be used to store recovered petroleum products. Access must be close enough to the recovery site so that hoses from the pumps can reach a tank truck. Storage tanks must be located on level, stable ground with access available for tank truck use. An earthen pit should only be constructed when tank trucks or storage tanks cannot be used. Earth-moving equipment and appropriate ground disturbance procedures will be required to construct a pit. A plastic lining should be used.

Disposal and Remedial Operations

Disposal of the product and site restoration actions will be determined for each site by consultation among operations personnel, the provincial environmental protection agency or other environmental regulators and any external contracted professional environmental consultants.

It is the company's responsibility when reporting a release to the regulatory agency or the Ministry of Environment (as appropriate) to inform any private individuals whose lands may be affected by the release. The company must notify the landowner of any release that occurs off a lease site, migrates off a lease site or occurs on an easement or right-of-way. The company is reminded that landowner cooperation is essential in being able to quickly respond to a release that is not on the normal working area of a lease site.

Western Canadian Spill Services (WCSS)

WCSS maintains spill contingency plans and provides spill response equipment to all member companies.

WCSS - http://www.wcss.ab.ca/

Spill Contingency Plan - http://www.wcss.ab.ca/contingency-manual.shtml

Live Equipment Report - http://emis.wcss.ab.ca/PublicInventoryReport.aspx



Post-Incident

Ensure all statements, event logs, forms and documentation on the incident remain securely stored following the incident. Records must be held for a minimum of 5 years as it may be requested by the regulatory agency at any point during that time.

Call Down Notification

After consultation with a senior company representative or the appropriate Regulatory Agency, Provincial Emergency Management or local County / Municipality, the Incident Commander will:

- 1. Give the "all clear" signal. Prior to the "all-clear" signal, the Incident Commander will confirm that all evacuated areas are safe to re-enter. This may involve such activities as:
 - Ensuring all equipment and locations are free of any pockets of fire, smoke and / or toxic gases.
 - Ensuring all equipment and debris are removed from offices and / or public areas.
 - o Cordoning off the incident area to isolate any remaining hazards.
 - Checking low-lying areas and basements for contamination, if a toxic leak has occurred.

After the "all-clear" message has been given, the Incident Commander will be responsible for:

- Ensuring all evacuees are promptly notified once the call down is given.
- Coordinating the return of any evacuees to the area. Ensure the public and employees receive any assistance they may require.
- Maintaining security in any evacuated areas until the evacuees have returned and the businesses in the area have again become occupied.
- 2. Coordinate the deactivation of all emergency response operations, personnel, equipment and incident areas.
- 3. Ensure all previous contacts, including other companies; government agencies, etc. are notified of the emergency status call down.
- 4. Advise all response team members to document their call down notification calls.
- 5. Prepare and release an "all clear" statement to the media in conjunction with the Regulatory Agency.
- Organize debriefing meetings for advisory personnel involved. In the case of incidents that have involved a death or serious injury, consult with Human Resources personnel about arranging critical incident counselling.
- 7. Notify and debrief Joint Interest Partners and Insurance company representatives.

Note: Ensure all statements, event logs, forms and documentation on the incident remain securely stored following the incident.

Public Care and Assistance

The decision to recall evacuees will be coordinated by the regulatory agency in consultation with other applicable government agencies and the licensee. Ensure the following tasks are completed as required:

- 1. Ensure all evacuees are promptly notified once the call down is given.
- 2. Coordinate the return of any evacuees to the area. Ensure the public and employees receive any assistance they may require.
- 3. Maintain security in any evacuated areas until the evacuees have returned and the businesses in the area have again become occupied.
- 4. Ensure homes and businesses are ventilated and checked for gas pockets before allowing the occupants to enter. Rovers must check each room, office and public area.



Post-Incident, continued

- 5. Ensure members of the Response Teams and other key participants in the emergency are debriefed as soon as possible.
- 6. Designate a senior company representative to act as the company Liaison with the public and other companies.
- 7. Ensure the affected employees and public are provided with post-incident company contact names and telephone numbers. If the emergency has impacted a large number of the public or has caused significant damage to private property or the environment, a temporary Public Relations Office should be established in the affected area.
- 8. Schedule a follow-up meeting with the public to clearly explain the cause of the incident and to address their concerns. Organize critical incident counselling as required.
- 9. Ensure public expense / damage claims have been collected and are processed in a timely manner.

Clean-up and Repair

If a serious injury or death has occurred, the scene must be left undisturbed, as much as possible, until an investigation of the site can be completed by the appropriate authorities.

Ensure the following tasks are completed as required:

- Ensure the incident site is not disturbed if there has been a fatality or a serious injury until police, regulatory officials and company representatives complete necessary investigations.
- Ensure that site clean-up continues.
- Ensure that the correct procedures are developed and implemented for the decontamination of equipment.
- Ensure the On-Site Group Supervisor disposes of all hazardous waste according to applicable regulations (confer with the safety support personnel, the Response Team or other company safety personnel).

Note: The position of On-Site Group Supervisor during the remediation phase may be best filled by an Environmental Specialist.

- Ensure that priority is given to clearing debris and restoring the site to normal operating conditions after the government and company investigations are complete.
- Ensure that all safety equipment is demobilized, cleaned and inspected for contamination.
- Ensure all roadblocks, staging area and detour equipment is demobilized.
- Ensure that all clean-up and repair actions follow the companies safety and environment policies and safe-work procedures.

Third Party Investigations

The Incident Commander will coordinate and observe all site investigations. Third party investigators such as police, government agencies and insurance companies may be required to investigate an incident site. It is important to co-operate with third party investigators. However, company personnel should be aware of the corresponding corporate guidelines.

• Obtain the name, title, address and telephone number of all inspectors and immediately inform the Incident Commander before proceeding with the investigation.



Post-Incident, continued

- Ensure a company representative accompanies the inspector at all times. Never leave an inspector unattended.
- Give the inspectors the information they request, the facts only, no speculative information. Always tell the truth.

Document all items of evidence that the inspector has retained. Where possible, keep copies of the evidence provided to the Inspectors.

Wait until legal counsel is present before answering questions where the inspector indicates that any statements may be used as evidence or indicates that you have the right to counsel.

Review and Debriefing

The effectiveness of the ERP shall be reviewed after the end of the emergency. In some situations, a formal debriefing may be held. The objective of the debriefing should be to improve emergency preparedness and response by identifying areas of success and areas requiring improvement (a debriefing should not be a fault-finding mission). If one is held, all groups that responded to the emergency should be represented. The representatives should come prepared with complete details of their activities during the emergency and, where possible, provide supporting documentation. Common elements of an effective debriefing include:

- a) A facilitator:
- b) A secretary to record the proceedings;
- c) A review of the sequence of events, including timing and actions taken; and
- d) Identification of those portions of the ERP that were effective and those that require improvement.

Action items identified during the debriefing should be documented and assigned with completion timelines, key lessons learned from emergency outcome should be shared with the appropriate parties, and the ERP should be revised as necessary. Separate debriefings may be held with different groups that participated in the emergency (e.g., emergency services organizations, the media, etc.).

Critical Incident Stress Debriefing (CISD)

Responders are often under a great deal of stress. They must act quickly, often in the face of pain and fear, to assess the situation, determine priorities and begin rescuing others who are in danger. They may have experienced a serious injury themselves or witnessed the death of co-workers or the public.

If necessary, the Incident Commander will request that the company's Human Resource personnel dispatch specially trained counselors to meet with responders, preferably within 24 to 48 hours, to provide support and reassurance to those affected by an emergency. Team members should include a mental health professional and trained peer support personnel (fire-fighters, paramedics, police, military, etc.).

CISDs allow individuals to express the circumstances they were confronted with, how they felt at the incident and what their reactions were after the incident. The participants must understand that the meetings are strictly confidential and are not intended to judge or lay blame on an individual's actions. Recording devices and note taking should be prohibited. Meetings should be limited to a maximum of 20 individuals. Individuals who are perceived to be responsible for the incident should be excluded from group meetings and met on a one-on-one basis.

These sessions provide the responders with a supportive environment that helps them deal with their emotions. It also provides them with information about stress and its effects (severe agitation, emotional upset, inability to sleep, etc.) and it educates them about stress management techniques.



Post-Incident, continued

Post-Incident / Accident Investigation

Once the emergency status has been removed, a senior company representative will appoint a subcommittee to investigate the event. This subcommittee will consist of appropriate management and technical specialists as required.

The objective of the investigation will be to analyze and evaluate the event in order to establish a cause, to provide advice on how to prevent a reoccurrence of the event, and to make recommendations on procedures that will improve the company's emergency response efforts in the future.

The post-incident / accident investigation should include:

- A review of the events leading up to the incident / accident.
- An analysis of the on-site remedial procedures, including an evaluation of the safety standards that were applied.
- An appraisal of the company's shelter-in-place / evacuation response for the affected public.
- An evaluation of the effectiveness of the notification and communication systems between the incident site and the head office, as well as within the company.
- An appraisal of the effectiveness of any media or public relations efforts.
- An assessment of any potential legal or environmental issues that may be raised as a result of the event or as a result of the company's response efforts.
- A summary of current and future costs.
- Completed appropriate event report forms and applicable attachments.
- An assessment of the strengths and weaknesses of the company's response.

This report will be directed to the attention of a senior company representative. It will be his / her responsibility to ensure all recommendations for improvements to the Corporate and Field Emergency Response Plans are incorporated where applicable and promptly communicated to the appropriate company personnel.

Within 30 days of the end of an incident, a Licensee must file with the Provincial Agency, National Energy Board (NEB), and / or the Transportation Safety Board (TSB), an Operator Incident Summary Report structured as outlined by the Provincial / Federal Agency. After reviewing the Operator Incident Summary Report, the Provincial and / or Federal agency may require that the licensee attend a meeting to further discuss the incident.

All documentation recorded during and following an emergency must be retained for up to five years in the event the Regulatory Agency requests it.



Medical Emergencies

DISCLAIMER: The information contained in this section does not replace formal First Aid, CPR & AED training. The company makes no guarantee as to, and assumes no responsibility for, the correctness, sufficiency or completeness of such information or recommendations. A First Aid provider is someone who has completed formal first aid training from a recognized provider. Training can be obtained from the Canadian Red Cross (www.redcross.ca) or St. John Ambulance (www.sja.ca).

The 3 basic steps to follow in any emergency:

Remember: stay calm, look for dangers, never risk your own safety

CHECK the person

- Does the person want your help? If the person is unable to answer, assume you have consent to give first aid.
- Check the person's ABCs (Airway, Breathing, and Circulation).



CALL EMS/9-1-1

- If the person responds, find out if there is a need to call EMS/9-1-1.
- If the person does not respond, call for help and EMS/9-1-1.



CARE for life-threatening conditions first

 Reduce the risk of disease transmission by using protective equipment, such as disposable gloves and a barrier device.



Canadian Red Cross (2013). Check, Call, Care First Aid Poster. Retrieved February 2013, from Canadian Red Cross Web site: http://www.redcross.ca/cmslib/general/tp_fa_poster_checkcallcare_web.pdf



Medical Emergencies, continued First Aid Information

CPR

The simplified Adult Basic Life Support algorithm includes five steps. The algorithm diagram provided by the American Heart Association emphasizes the following:

- **1.** Assess the victim's responsiveness. If a victim is not breathing, or is not breathing normally (i.e., gasping), initiate CPR. Health care professionals should be trained to recognize cardiac arrest that presents as seizure-like activity or with agonal respirations.
- 2. Activate EMS (Emergency Medical Response) by calling 911.
- 3. Retrieve a defibrillator, usually an automatic external defibrillator (AED).
- 4. The algorithm proceeds in a loop of CPR and rhythm checks with defibrillation.
- **5.** Check PULSE before chest compressions for at least five seconds and no more than ten seconds. If in doubt, begin compressions
- **6.** CPR: push hard and fast. Begin chest compressions before ventilation. Chest compressions allow blood flow to the heart and brain. Delays in chest compressions result in diminished survival. Be sure to allow the chest to recoil between compressions. The chest should be compressed 100-120/min to a depth of 2"-2.4" (5-6cm)
- **7.** For effective breathing, watch for chest rise and avoid excessive ventilation. 10 BREATHS should be delivered each minute, or one breath every six seconds. Each breath should be delivered over 1 second. Observe visible chest rise.
- **8.** Avoid gastric inflation, as it may result in aspiration, pneumonia or vomiting.
- **9.** The ratio of chest compressions to breaths is 30 to 2.
- **10.** After the defibrillator becomes available, check rhythm. Use the AED when indicated and available. The victim should receive a shock that is repeated every two minutes or 5 cycles.

Burns

The American Red Cross recommends these steps to care for minor burns.

- Stop the burning. Put out the flames or remove the victim from the source of the burn.
- Cool the burn. Use large amounts of water to cool the burned area. DO NOT use ice or ice water
 other than on small superficial burns. Ice causes body heat loss. Use whatever resources are
 available: tub, shower or garden hose. You can apply soaked towels, sheets or other wet cloths to a
 burned face or other areas that cannot be immersed. Be sure to keep cloths cool by adding more
 water.
- Cover the burn. Use dry, sterile dressings or a clean cloth to cover a burn. Loosely bandage them in place. Covering the burn helps keep air out and reduces pain. Covering the burn also prevents infection. If the burn covers a large area of the body, cover it with clean, dry sheets or other cloth.

For minor burns and burns with open blisters that are not serious enough to need medical care, wash the areas with soap and water. Keep it clean. Put on an antibiotic ointment. Watch for signals of infection.



Medical Emergencies, continued

Burns. continued

Critical burns will need immediate medical attention. Call 911 or your emergency number if any one of the following instances occurs:

- · Victim is having difficulty breathing.
- More than one part of the body is burned.
- There are burns to the head, neck, hands, feet or genitals.
- A child or an elderly person has been burned.
- Chemicals, electricity or explosions have caused the burns.

Chemical Exposure Guidelines

- In the event of chemical exposure, emergency services or poison control centre should be contacted as soon as possible.
- The eye may be irrigated using copious amounts of clean water, preferably using an eyewash bottle, eyewash station or shower.
- First aid providers may use continuous, large volumes of clean water for irrigation of chemical injuries where chemical exposure has occurred to other parts of the body.

Wounds & Abrasions Guidelines

- Superficial wounds and abrasions should be irrigated with clean water, preferably tap water because
 of the benefit of pressure.
- First aid providers may apply antibiotic ointment to skin abrasions and wounds to promote faster healing with less risk of infection.
- First aid providers may apply an occlusive dressing to wounds and abrasions with or without antibiotic ointment.
- The use of triple antibiotic ointment may be preferable to double- or singleagent antibiotic ointment or cream.
- If antibiotic is not used, antiseptic could be used.
- There is some evidence that traditional approaches, including applying honey, are beneficial and may be used on wounds by first aid providers.
- People with wounds that develop redness, warmth or become painful or with wounds where the
 person develops fever should seek assessment from a healthcare provider.



Medical Emergencies, continued

Bleeding Guidelines

- First aid providers must control external bleeding by applying direct pressure.
- The use of pressure points and elevation is NOT recommended.
- When direct pressure fails to control life-threatening external limb bleeding or is not possible (e.g.
 multiple injuries, inaccessible wounds, multiple casualties), tourniquets could be considered in special
 circumstances (such as disaster, war-like conditions, remote locations or in instances where specially
 trained first aid providers are providing care).
- Localized cold therapy with or without pressure may be beneficial in haemostasis for closed bleeding in extremities. Caution is advised when applying this recommendation to children due to a potential for hypothermia.
- The out-of-hospital application of a topical haemostatic agent to control lifethreatening bleeding not controlled by standard techniques and in situations where standard techniques could not be applied could be considered with appropriate training.

Source: www.redcross.ca/crc/documents/1303501 FirstAid-2016 Guidelines LR-PDF.pdf



Medical Emergencies, continued

Next-of-Kin Notification

When an employee, contractor or member of the public is seriously injured, missing, or pronounced dead, the next-of-kin must be notified as promptly as possible. Keep in mind the following policies before notifying any next-of-kin:

- Death is never presumed, and first aid must be administered until relieved by a paramedic.
- No telephone or radio discussion is to take place regarding the name(s) of the injured.
- Notification is not to occur until the casualty has been pronounced dead by a medical doctor or medical examiner.

If an employee, contractor or member of the public is injured or killed as a result of company operations; notifications will be coordinated through local RCMP / municipal police and designated company personnel.

Before Notifying the Next-of-Kin

- Never release the names of the injured, missing, or persons pronounced dead before the next-of-kin are notified.
- Triple-check the identity of any casualty.
- If the casualty is conscious, document concerns. Do not make promises that cannot be kept.
- Confirm the casualty's relationship with the people being notified.
- Be prepared to support the next-of-kin. Provide assistance such as transportation, child care, alternative accommodation, reimbursements for daily expenses, and the temporary care of the family home if required.

During the Notification of the Next-of-Kin

- Make the notification in person, not by telephone or through an intermediary.
- Provide the relatives with as much information as possible; too few details can cause excessive worry. Present only the facts; do not speculate.
- Do not discuss personal views of liability or fault.
- Allow the next-of-kin to vent their emotions.
- Attempt to support and reunite families as quickly as possible.
- Offer assistance; document key issues and concerns. Do not make promises that cannot be kept.
 Follow up on relatives' requests.
- Document the details of anyone who appears to be having trouble coping with the incident so that he
 / she can be given prompt psychological support.



Medical Emergencies, continued

During the Notification of the Next-of-Kin, continued

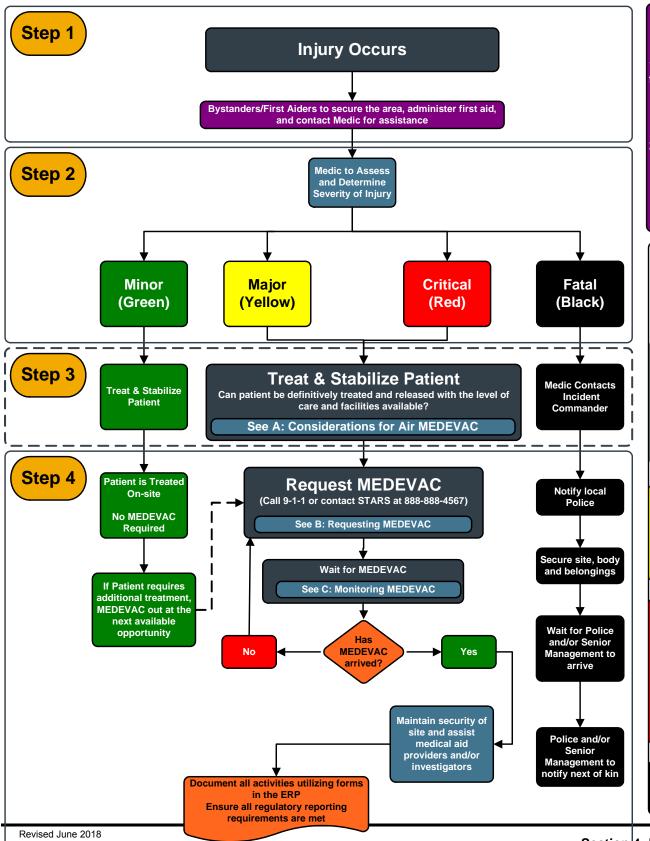
- Do not leave the next-of-kin alone.
- Offer to contact a neighbour, friend, relative, minister, doctor, or counsellor.
- Leave your name and telephone number with family members.
- Ensure the next-of-kin are protected from media harassment as required.

Follow-Up

- The same representative who conducted the initial notification should continue to contact and support the next-of-kin.
- If required, a senior company representative will ensure that a trained psychologist conducts critical
 incident stress debriefing sessions with next-of-kin, friends and company employees involved or
 affected by the tragedy.
- Advise the employee's family that a senior company representative will be contacting them to discuss
 any immediate needs and to provide information on insurance coverage and benefits support. Follow
 up on this commitment.



Medical Evacuation (MEDEVAC) Procedure



In the event of any injury or illness the following steps shall be followed:

1) Survey the scene and ask yourself the following questions:

Is it safe for me to help?

What happened?

э How many people are injured?

2) Call for help:

- 1) Activate Emergency Responders and/or call 9-1-1
- 2) Identify your location
- Follow the direction of the Medic and administer First Aid if required and you are trained to do so
- 4) Review Step 1

Patient Priority Colour Code

The practice of colour coding patients is a useful tool to prioritize patients into categories depending on their medical condition. This colour code system allows ease of communicating the condition of the patient to those involved in the care and transportation of the patient.

<u>Green</u> – Patients with minor injuries or illnesses who are usually walking. Medical care can be delayed beyond 2 hours.

For example:

- Minor burns
- > Sprains and strains
- > Colds and flu symptoms

Yellow – Patients with major injuries or illnesses that should be treated within 20 minutes to 2 hours.

For example:

- Open fractures
- Large lacerations

<u>Red</u> – Patients with critical, life threatening injuries or illnesses that require treatment as soon as possible.

For example:

- Airway problems
- Severe hemorrhage
- > Severe burns
- Failing vital signs

<u>Black</u> – Death is obvious. Note: resuscitation / treatment must continue until directed otherwise by a qualified medical provider. Await Police.

A: Considerations for Air MEDEVAC

Consider air transport when:

- Patient requires critical care life support during transport that is not available locally.
- Patient's condition requires that time spent in transport be as short as possible.
 Potential delays associated with ground transport (road obstacles or conditions traffic distance) are likely to warren the nation's condition.
- Patient is located in an area inaccessible to regular ground transport.
- , The use of medical transportation resources would leave the local area or

B: Requesting MEDEVAC

When requesting MEDEVAC, be prepared to supply the following information:

- Location of patient pickup (facility, airport, road intersection, GPS)?
- Who will be meeting MEDEVAC crew (radio callsign / frequency, cell number)?
 Will the patient meet the MEDEVAC crew at the pickup location or will the MEDEVAC crew need to be transported to the patient?
- ? Any special equipment required (ventilator, bariatric transport equipment, etc.)?
 Will any additional personnel be necessary (physician, nurse)?
- Is there an intended destination (major hospital, community)?
-) Has any consultation with medical providers at the intended destination been done?

Do not delay launch / dispatch of MEDEVAC, provide the following information once available:

- Mechanism of injury (and time of injury if known)
- Injury or illness sustained
- Symptoms and vital signs
 Treatment given

C: Monitoring MEDEVAC

When requesting MEDEVAC, ensure that you are monitoring the transport and are aware of who to contact for updates and in case changes to plan are required.

When is MEDEVAC transport scheduled to arrive?:

What number should be contacted if something in the plan needs to be changed?

If transport doesn't arrive, or if no updates are heard, what time will we contact MEDEVAC for an update?

Emergency MEDEVAC Phone Numbers

PROVINCIAL AIR AMBULANCE:

Alberta 800-661-3822 British Columbia 911 Manitoba 800-689-6559

Saskatchewan 888-782-8247

STARS (AB, BC, SK, MB): 24 Hour Emergency: 888-888-4567



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Responder Safety

Site Safety

Response personnel must stay out of the hazard area until the hazards are identified and assessed. All responders must evaluate potential site hazards including ignition sources or vapours gathering in low-lying areas such as ditches, trenches and forested areas. The nature of a hazard will influence the responses. Therefore, the following characteristics about the hazard **must** be considered:

- The quantity and type of product involved.
- The potential for the situation to escalate.
- The location of the incident, the time of day and the weather conditions.
- Actual and perceived danger to responders, the public and the environment.
- The number of responders and their training.
- The availability of response equipment.
- The availability of external support, e.g. ambulances, police, fire fighters and mutual aid.

Responders **must** approach an incident site that may have gases or explosive vapours from an upwind or crosswind direction. They should inspect the site from a distance (using binoculars if possible) if hazards have not been assessed. When on-site, responders must take the following precautions:

- Identify safe escape routes away from hazardous areas.
- Continue to assess the related hazards, e.g. toxic vapours, fire or explosion hazards.
- Protect themselves and others (responders and public) before initiating control and containment operations.
- Do not allow anyone, including first responders such as police, fire fighters or ambulance attendants to enter the hazard area unless they are properly trained and equipped with personal protective equipment.
- Avoid extinguishing an ignited hydrocarbon release if the supply cannot be stopped.
- Only attempt fire control on small fires. Extensive fires or uncontrolled facility fires must be dealt with by external firefighting professionals. Responders must not attempt to battle a fire without adequate firefighting equipment, training and backup personnel.
- Advise fire authorities when a company facility is threatened by an external fire. They should also be
 made aware of dangerous products or flammable hazards at the facility, such as pressurized NGL
 vessels, chemical and fuel storage.

Consider an outside expert when necessary. Well control, for example, is a speciality requiring specific experience, equipment and procedures.



Responder Safety, continued On-Site Work Areas

The On-Site Group Supervisor may choose to separate the site into three distinct areas to clearly identify the high risk areas and to reduce the hazards to the on-site responders. The three areas could be defined as the safe area, the hazardous area and the decontamination area.

Hazardous Area (Hot Zone)

Extreme caution and planning must be undertaken when entering the hazardous area. Access to and from the hazardous area will be controlled. Only personnel with appropriate personal protective equipment, training and an understanding of the specific response and control procedures will be allowed into the hazardous area. An example is confined space entry and rescue. Prior to entry into the hazardous area, all personnel should fully understand the goals, the method of on-site responder communication and the rescue plan.

The following guidelines help the On-Site Group Supervisor to determine the hazardous area. An area is considered hazardous if any of the following conditions exist:

- Combustible gas reading of 10% LEL or greater
- H₂S gas reading of 15 ppm or greater for 15 minutes
- SO₂ readings of 5 ppm or greater for 15 minutes
- Oxygen content of less than 19.5% or greater than 22%
- Presence of organic and inorganic vapours / gases and liquids (consult Safety Data Sheets (SDS) for toxicity data)
- An area the On-Site Group Supervisor deems to be hazardous, such as the area surrounding a fire or spill

The On-Site Group Supervisor will consider the following on-site conditions when determining the size of the hazardous area:

- The location of access routes, power lines, pipelines, fire and explosion hazards
- Areas where vapours are likely to accumulate such a downwind areas, low areas, confined spaces
- Site stability, e.g. steep slopes, overhanging banks, unstable soil, thin ice
- Weather conditions
- The toxicity and evacuation data for the product involved (Refer to SDS)

Decontamination Area (Warm Zone)

Personnel responding to hazardous substance emergencies may become contaminated in several ways:

- Contacting vapours, gases, mists or particulate in the air.
- Being splashed by materials while sampling or opening a container.
- Walking through puddles of liquids or on contaminated soil.
- Using contaminated instruments or equipment.



Responder Safety, continued

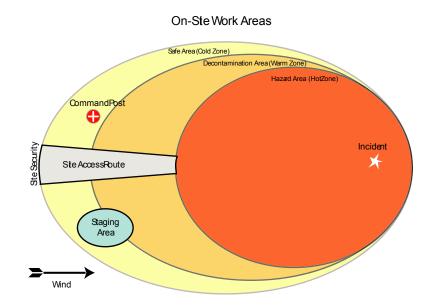
Decontamination is the complete or partial removal or neutralization of the harmful contamination chemicals. Some equipment will not withstand a proper decontamination process and therefore must be destroyed. Site safety personnel will recommend to the On-Site Group Supervisor whether clothing, instruments and equipment should be decontaminated or destroyed.

The decontamination area is usually set up in response to a hazardous material spill and when decontamination of personnel and equipment is required. The decontamination area buffers the designated hazardous and safe areas. Decontamination areas should be set up in areas that are not affected by the onsite hazard. Any contaminated personnel and equipment leaving the hazardous area must be decontaminated in the decontamination area before continuing to the safe area.

Equipment, solutions and procedures required for decontamination depend on the type and degree of contamination. All hazardous waste must be disposed of according to applicable waste management regulations.

Safe Area (Cold Zone)

The safe area is an area verified by the On-Site Group Supervisor to be safe. The On-site Command Post (OSCP) is located in the safe area. The safe area must be continually monitored and evaluated to confirm its safety. If there is any concern about the area's safety, the On-site Command Post will relocate to an area proven to be safe.





Responder Safety, continued

Working Alone

A Working Alone Procedure and a working alone hazard assessment are legislated responsibilities of every employer. One working alone hazard assessment may fit multiple work sites providing the working conditions are the same. These assessments must be available for the workers to review. All working alone hazards shall be mitigated to a reasonable and practical level of risk. Every worker who works alone must have a designated "Working Alone Contact". Activities, dates, and times of contact shall be documented and filed. The "Working Alone Contact" may be a co-worker, a 24/7 facility control room, a third party emergency answering service, or automated working alone tracking system.

Application

Each operating area will develop a Site Specific Procedure (SSP) for Working Alone; the SSP will be documented, approved by management, and signed by every company employee or contract employee working in that operating area. Service suppliers will be expected to provide their own "Working Alone Programs" but due to communication limitations or emergency response capabilities they may need to utilize the company Working Alone Program, this temporary change of "Working Alone Contact" should be documented on the safe work permit.

Potential Hazards

- Loss of communication needed for requesting assistance;
- Delays in reporting times;
- Injury requiring assistance; and
- Transportation problems.

Equipment and Training Requirements

- The Working Alone Procedure and Response Plan for the overdue worker are to be a specific agenda item for safety meetings to ensure a suitable level of acceptance and involvement from all personnel is achieved, and
- Supervisors and members of the management shall discuss the plan with workers that participate in field activities, to ensure a high level of awareness and preparedness is maintained at all times.

Low Risk Working Alone Procedure

(Sweet Gas Operations, daylight hours, normal weather conditions)

- The employee should notify their "Working Alone Contact" of check-in times and locations of work;
- If multiple travel routes are an option then the route selected will also be noted
- If an employee's arrival at a check-in location is delayed by more than one (1) hour, the employee should notify their "Working Alone Contact" of the new estimated time of arrival.



Responder Safety, continued High Risk Working Alone Procedure

(Sour Gas Operations, Call-outs, Adverse Weather Conditions)

- The employee should notify their "Working Alone Contact" prior to departure, and advise them contact of the estimated time of arrival at location;
- The employee should notify their "Working Alone Contact" of arrival at location;
- The employee should assess the problem or job scope, notify their contact, discuss the nature of the
 problem or job, work procedure to be used, and any additional required safeguards, and provide an
 estimation of how long they will be at the location;
- The employee should notify their "Working Alone Contact" when they are finished and ready to leave the location and estimated time of arrival at next check point, base or home; and
- The employee should notify their "Working Alone Contact" of arrival at next checkpoint, base or home.
- If the employee is delayed or expects to be delayed arriving at their next check-in point by more than one (1) hour, the employee should notify their "Working Alone Contact" of amended estimated time of arrival.
- During adverse weather conditions the employee should notify their "Working Alone Contact" of the exact route to be followed; shorter check-in time intervals are recommended.

Note: Every worker has both the right and responsibility to refuse unsafe work.

Overdue Worker Response Plan

- The Overdue Worker Response Plan shall be initiated when a worker is one (1) hour overdue, (shorter grace periods may be instituted during bad weather or at high risk worksites), and
- After the one (1) hour grace period has expired, the worker's "Working Alone Contact" shall:
 - Attempt to contact the overdue worker by cell phone or radio; immediately notify the worker's supervisor of the circumstances;
- The supervisor will discuss options with the "Working Alone Contact" and together they will agree on an action plan; and
- The action plan may include any or all of the following:
 - o Continue attempts to contact the overdue worker by cell phone or radio:
 - The "Working Alone Contact" or other designated individual will drive the route taken by the overdue worker in an attempt to contact the worker. Specific PPE safety equipment may be required for rescue activities by those involved with the Overdue Worker Response Plan;
 - The "Working Alone Contact" or the supervisor may request search assistance from industry workers in the area who have been identified in the contact list;
 - The "Working Alone Contact" or supervisor will call local hospital(s) to establish whether an injured person has been admitted; and
 - The "Working Alone Contact" or supervisor may notify the local police or RCMP of circumstances with a request for assistance.



Responder Safety, continued Missing Persons

In the event that an employee should go missing:

- Confirm that the person has failed to check in at the predetermined time.
- Contact the person's supervisor (or next in line for reporting) and provide details, e.g. where the person was working, length of time overdue, and if the person is alone.
- If it is deemed appropriate to initiate a search, inform a supervisor (or next in line for reporting) of any
 plans before any employees head out to search.
- Employees should never endanger themselves during a rescue.
- Searchers should always use the buddy system and work in teams. Each team must be fully
 equipped, names logged, and their designated search area recorded on a map before heading out.
 Searchers should carry maps and compass, GPS (Global Positioning System) unit, survival kit, first
 aid kit, communication equipment, extra batteries, and appropriate provisions.
- Search first where the missing person will most likely be found, e.g. where the person's truck is parked.
- If the missing person is not found within a specified time (e.g. two hours), notify the appropriate Search and Rescue (SAR) authority and/or local police.
- When formal SAR groups are engaged, it is imperative that only one person coordinates all operations.
- Notify ALL authorities when the missing person is found so all search participants are informed and can cease their efforts.
- Complete and submit the required accident/incident investigation form.

Source: PDAC Field Safety Pocket Guide

Rest Periods

Response members may experience a wide array of stresses which may include the death or serious injury of a co-worker, witnessing distressing sights, time pressures, responsibility overload, physical demands, mental demands, emotional demands, limited resources and high expectations from others, hazardous environments or extreme weather conditions.

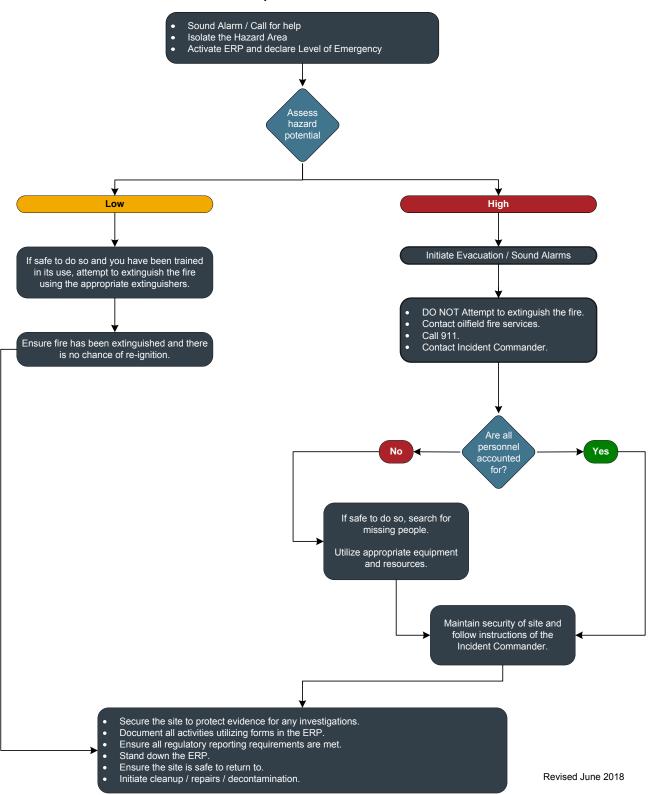
In high-stress assignments, responders should be routinely rotated. Where manpower is limited, responders should alternate from high-stress positions to lower-stress positions.

Fifteen to thirty minute rest periods should be scheduled every two hours during an emergency situation for all responders; and if possible, provided with:

- Shelter from weather, dry clothes and a place to sit or lie down away from the scene.
- Warm food, high protein snacks and juices.
- An opportunity to share their feelings with co-workers.

Fire / Explosion

Fire Explosion Consideration





Fire / Explosion, continued

An explosion is a mechanical or chemical reaction that suddenly releases a large amount of energy, resulting in a shock or pressure wave that causes damage, high temperature and usually a release of gases. Explosions can be loosely categorized according to reaction time. High explosives react quickly within a millionth of a second, while low explosives react more slowly. Important general guidelines must be followed for all fires or explosions to ensure the safety of the public, employees and environment. When encountering different types of fire, the appropriate firefighting services should always be contacted. This is especially important for fuel-related, structure-related or forest-related fires to decrease the risk of major damage. For oil-related fires, industrial fire-fighters are the best equipped to reduce further danger in the area.

If a fire or explosion occurs, the following actions shall be taken:

Control / Containment:

- If possible;
 - Isolate the source and take reasonable action to extinguish or contain the fire.
 - Shut down all known fuel sources.
 - Shut off high voltage power supplies to equipment in fire-affected area.
 - o Shut off fuel to heaters near to, or downwind of fire.
 - o Dissipate static electrical charges on bodies of all personnel in area. Grounding may be accomplished by holding onto a metal structure for ten seconds with bare hands.
- Call out to industrial firefighting services.
- Notify the Incident Commander.
- Isolate hazard area or equipment as required.

External Notifications:

 Follow notification procedures for fires outlined in the Government Notification Matrix in Section 5: External Agencies.



Fire / Explosion, continued Classification of Fires

Most fires that occur will fall into one or more of the following categories:

Class / Symbo	ı	Material	Extinguishing Agent			
A		Ordinary combustible materials, such as wood, paper, cloth, trash, and plastics.	Cooling, blanketing or wetting extinguishing agent is needed. Water and foam extinguishers work on this class of fire.			
В		Flammable liquids such as gasoline, thinners, oil-based paints and greases; Also includes flammable gases such as propane and butane.	Extinguishers for this type of fire include carbon dioxide, dry chemical and halogenated or clean agent types.			
©		Energized electrical equipment, such as motors transformers and appliances.	The most common type of extinguisher for this class is a carbon dioxide extinguisher. A dry chemical or clean agent extinguisher can also be used.			
		Combustible metals such as magnesium, sodium, potassium, titanium and aluminum.	Special dry powder extinguishing agents are required for this class of fire, and must be tailored to the specific hazardous metal.			
K		Cooking oils and greases such as animal fats and vegetable fats.	A wet chemical fire extinguisher agent is used for this class of fire.			

Source: www.femalifesafety.org



Fire / Explosion, continued Response Actions Based on Type of Fire

Process Fire

Definition:

Process fires include those within or adjacent to: fractionation skids, compressors, exchangers, vessels (also see BLEVE / LPG), piping, tanks/bullets (also see BLEVE / LPG).

Hazards:

Process fires can be a particular hazard where flammable materials are present.

Response Actions:

Deny or restrict access to the area, shut down and depressurize any related or additional process equipment, if safe to do so. Do not attempt to extinguish a process fire if you are not properly trained.

Sulphur Fire

Definition:

Sulphur dust suspended in air ignites easily, and can cause an explosion in confined areas.

Hazards:

Toxic gases will form upon combustion. Bulk/solid forms burn only at a moderate rate, whereas dust burns with explosive violence. Burning sulphur decomposes into toxic sulphur oxide gases such as sulphur dioxide (SO₂) and hydrogen sulphide (H₂S) which is toxic if inhaled.

Response Actions:

The following precautions should be taken when dealing with sulphur fires:

- Prevent human contact or inhalation. Fire may produce irritating and/or toxic gases.
- Wear full faced, self-contained breathing apparatus and full protective clothing.
- Use a water fog, NOT water, to extinguish fire.
- Cool fire, surrounding area, and containers, tanks, and trucks to below 154°C in order to diminish the fire.
- Evacuate the area, except for essential personnel.
- Isolate the area with a 1600m radius.

Trained personnel, local fire departments or contract fire services should only attempt to control a sulphur fire. To ensure public protection, evacuate 1600 meters in all directions and ensure air monitoring is set up downwind of fire and the smoke plume. Continually assess evacuation zone based on air quality readings.



Fire / Explosion, continued

Electrical System Fire

Definition:

Electrical fires are fires involving potentially energized electrical equipment. This sort of fire may be caused by, for example, short-circuiting machinery or overloaded electrical cables.

Hazard:

Electrical fires can quickly get out of control and can cause serious damage and threaten lives.

Response Actions:

Electrical fire may be fought in the same way as an ordinary combustible fire, but water, foam, and other conductive agents are not to be used. While the fire is, or could possibly be electrically energized, it can be fought with any extinguishing agent rated for electrical fire. Carbon dioxide CO₂, FM-200 and dry chemical powder extinguishers such as PKP and even baking soda are especially suited to extinguishing this sort of fire. Once electricity is shut off to the equipment involved, it will generally become an ordinary combustible fire. Water conducts electricity; throwing water on an electrical fire can cause the fire to get larger.

Grass Fire

Definition:

A grass fire is a fire that burns large amounts of grass. They mainly occur in grasslands and or Great Plains.

Hazards:

Grassfires spread rapidly, travelling at speeds of up to 25 km/hr, and can quickly threaten lives and properties.

Response Actions:

Threatening grass fires have a potential to involve the licensee's and other area operators' facilities, pipelines and well sites, therefore guidelines to minimize damage to any property need to be followed. To protect the licensee's and other area user property, it is important to follow these guidelines:

- Notify other area operators of the emergency.
- Isolate and shut in all affected facilities if safe to do so.
- For small grass fires extinguish using a shovel or ABC type fire extinguisher. If it enters coulees, along
 rivers, or into large areas of trees or forests, contact the local fire department and local forestry office
 for assistance.
- For larger grass fires do not attempt to extinguish, but contact local fire department and local forestry
 office.



Fire / Explosion, continued

Natural Gas Liquid Fire

Definition:

Liquid natural gas is very flammable after vaporization to a gaseous phase.

Hazard:

If liquid natural gas is spilled, it vaporizes. The natural gas vapours are initially heavier than air and they form a cloud close to the ground, which is pushed downwind and eventually dissipates. If a viable ignition source is present where a vapour cloud exists at a 5%–15% concentration in air, the vapour cloud can ignite and burn. A vapour cloud, formed by an LNG spill, could drift downwind into populated areas. An LNG fire gives off a tremendous amount of heat. Water will react violently with the LNG and may cause the fire to flare up and intensify.

Response Actions:

A solid stream of water should never be used to extinguish this type because it can cause the fuel to scatter, spreading the flames. The most effective way to extinguish a liquid or gas fueled fire is by inhibiting the chemical chain reaction of the fire, which is done by dry chemical and Halon extinguishing agents, although smothering with CO₂ or, for liquids, foam is also effective.

BLEVE

Definition:

BLEVE is an acronym for Boiling Liquid Expanding Vapour Explosion. It is the term for an uncontrolled fire and explosion of vapour as it escapes from a ruptured vessel of pressurized / liquefied gas. Such explosions can be extremely hazardous.

Hazards:

The hazards associated with a BLEVE include the initial impact of the blast, the fireball and radiation from the explosion and projectiles (pieces of the tank and nearby equipment) that are rocketed from the explosion.

Response Actions:

- Contact Emergency Response Assistance Canada (ERAC) for assistance with emptying any damaged tanks.
 - Under the plan, response is provided for the following chemicals: LPG UN 1075, Propane UN 1978, Butane UN 1011, Propylene UN 1077, Butylene UN 1012, Isobutane UN 1969, Isobutylene UN 1055, Butadiene-1,3 UN 1010
- If safe to do so, attempt to extinguish any fires before they come in contact with any storage bullets.
- Call 911 to obtain assistance with fire suppression. Ensure all responders are made aware of the hazards.
- Flowing water can be used to cool the tanks in order to prevent or delay a BLEVE; however, this
 requires a significant amount of water and should not be attempted unless an unlimited water supply
 can be located and the tank can be approached safely.
- Evacuate all personnel and isolate the area to a 1600m radius.
- Evaluate the tank from a safe distance away. Choose an upwind position to the side of the tank if possible.
- Leave the area immediately if you hear a rising sound from venting safety devices or see discoloration of the tank.

Fire / Explosion, continued

BLEVE Considerations Based on Tank Capacity

BLEVE																			
Capacity		Diameter		Length		Propane Mass	Minimum time to time to failure for severe torch Approximate time to empty for engulfing			Emergency response distance		Minimum evacuation distance		Preffered evacuation distance		Cooling water flow rate			
Litres	Gallons	Meters	Feet	Meters	Feet	kg	lbs	Minutes	Minutes	Meters	Feet	Meters	Feet	Metres	Feet	Meters	Feet	Litres/min	Gal/min
100	38.6	0.3	1	1.5	4.9	40	88	4	8	10	33	90	295	154	505	307	1007	94.6	25
400	154.4	0.61	2	1.5	4.9	160	353	4	12	16	53	90	295	244	801	488	1601	189.3	50
2000	772	0.96	3.2	3	9.8	800	1764	5	18	28	92	111	364	417	1368	834	2736	424	112
4000	1544	1	3.3	4.9	16.1	1600	3527	5	20	35	115	140	459	525	1722	1050	3445	598	158
8000	3088	1.25	4.1	6.5	21.3	3200	7055	6	22	44	144	176	577	661	2169	1323	4341	848	224
22000	8492	2.1	6.9	6.7	22	8800	19400	7	28	62	203	247	810	926	3038	1852	6076	1404	371
42000	16212	2.1	6.9	11.8	38.7	16800	37037	7	32	77	253	306	1004	1149	3770	2200	7218	1938	512
82000	31652	2.75	9	13.7	45	32800	72310	8	40	96	315	383	1257	1435	4708	2200	7218	2710	716
140000	54040	3.3	10.8	17.2	56.4	56000	123457	9	45	114	374	457	1499	1715	5627	2200	7218	3539	935



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FIRE / EXPLOSION, continued

FOREST FIRE / WILDFIRE

Definition:

A forest fire is an uncontrolled fire in a wooded area. A forest fire is a natural disaster consisting of a fire which destroys a forested area, and can be a great danger to people who live in forests as well as wildlife. Forest fires are generally started by lightning, but also by human negligence or arson, and can burn thousands of square kilometres.

Hazards:

Forest fires can quickly get out of control and can cause serious damage in agricultural and forested lands.

Response Actions:

- Notify other area operators of the emergency.
- Isolate and shut in all affected facilities if safe to do so.
- For small fires extinguish using a shovel or ABC type fire extinguisher. If it enters coulees, along rivers, or into large areas of trees or forests, contact the local fire department and local forestry office for assistance.
- For larger fires do not attempt to extinguish the fire. To report a forest fire/wildfire, call:

British Columbia	1-800-663-5555 (Prov-wide) or *5555 (from cell, Prov-wide)				
Alberta	310-FIRE (3473) (Prov-wide)				
Saskatchewan	1-800-667-9660 (Prov-wide)				
Manitoba	1-800-782-0076 (Prov-wide)				
Northwest Territories	1-877-NWT-FIRE (698-3473) (Prov-wide)				
Ontario	Local Fire Department or 911				
Quebec	1-800-463-FEUX (3389) (Prov-wide)				



FIRE / EXPLOSION, continued

FOREST FIRE / WILDFIRE

Fire Season Procedure

- Determine a single point of contact to manage wildfire response for either a specific area or discipline (e.g. drilling specific to the Duvernay or drilling as a whole).
- Identify number of staff working in each area
- Ensure all staff have access to transportation if evacuation is required
- Identify the lowest number of staff required to continue operations
- Determine who is considered non-essential staff.
- What is the timeframe to shut in operations?

0	Drilling
0	Completions
0	Production Operations
_	Construction

- Is there anything that can be done during wildfire season to reduce shut-in timeframe
 - o Wireline Plugs?
- Visual Air Quality Assessment conducted regularly

0

To estimate particulate matter concentrations that are potentially harmful using a visibility assessment use the following procedure:

- 1) Face away from the sun.
- Look for landmarks at known distances.
- Determine the visibility range the limit of which is the point where even high-contrast objects, like a mountain or a dark building, totally disappear.
- 4) Estimate visibility in kilometres.
- Use the table below to identify the suggested health message and appropriate action, based on the air-quality category.

Table 1: Estimating air quality using visibility

Adapted from Wildfire Smoke: a guide for public health officials: www.arb.ca.gov/smp/progdev/pubeduc/wfgv8.pdf

Visibility in km	Air Quality Category	Equivalent approx. PM2.5 1- 3 hour average in μg/m3*
15 km and up	Good	0-40
5-14 km	Moderate/Unhealthy for Sensitive Groups	41-175
2.5-4 km	Unhealthy	176-300
1.5-2 km	Very Unhealthy	301-500
Less than 1 km	Hazardous	over 500

^{*}The concentration of an air pollutant (e.g. Particulates less than 2.5 microns in diameter — PM2.5) is given in micrograms (one-millionth of a gram) per cubic meter air or µg/m3.

The visibility index may be unreliable at times when specific landmarks at known distances are unavailable or when visibility is poor e.g., at dawn or dusk and at night. The above index also only applies to the particulate matter (PM) levels in dry air conditions. This method of estimation is not accurate during high humidity conditions.



FIRE / EXPLOSION, continued

FOREST FIRE / WILDFIRE

- Active monitoring of wildfire begins when a fire within 50km to operational activity occurs
 - GIS will produce a web map updated daily with our operations and wildfire locations during wildfire season (Mar 1st- Nov 30th)
 - It would be advantageous to plot more transient activities on this map as well (e.g. Drilling/Completions activity)
 - Emergency Response Coordinator and operational points of contact will regularly monitor this map. Once the 50km threshold is reached the coordinator will contact the operational point of contact.
 - If the fire is deemed a threat to operations an area specific map will be produced with markers identifying distance to fire as well as a map of all heavy equipment and water sources wildfire responders could utilize.
- Once a fire is deemed a threat a determination as to what kind of evacuation will take place is required
 - Tactical evacuation: May occur when the emergency wildfire situation has escalated with little notice where authorities recommend an immediate evacuation due to an emerging wildfire threat.
 - Strategic evacuation: May occur when a wildfire threat in not imminent however is likely to impact the operation. Projected time of impact of a probable threat will be provided by provincial or municipal authorities. This may also occur when smoke from wildfire is affecting air quality of the operation where a full or limited evacuation is recommended.
- The identification of evacuation routes within the area must be made at this time as it will be a factor in determining evacuation type and evacuation trigger points.
- Evacuation trigger points must be identified.
 - trigger points help decide when to change or modify operations. A trigger point is defined as a point of reference from which predetermined actions take place. It is important to consider factors specific to the operational environment when developing trigger points for wildfire response planning. These may include time to evacuate, distance of the operation from the fire or smoke, or physical features such as a river or road.
 - Wildfire evacuations could involve a few different scenarios and it is important to understand how your trigger points will relate to various threats.

 External resources and expertise can be utilized where internal expertise is limited.

 Operational personnel should be involved in developing these triggers, and emergency response plans and associated trigger points should be communicated to workers.
- If it is determined that a strategic evacuation is preferred evacuation timeframes must be determined. A generally used fire speed rate is between 8-10 km/hr. This is only an estimate though and cannot take into account extreme weather conditions like drought or high winds.



FIRE / EXPLOSION, continued

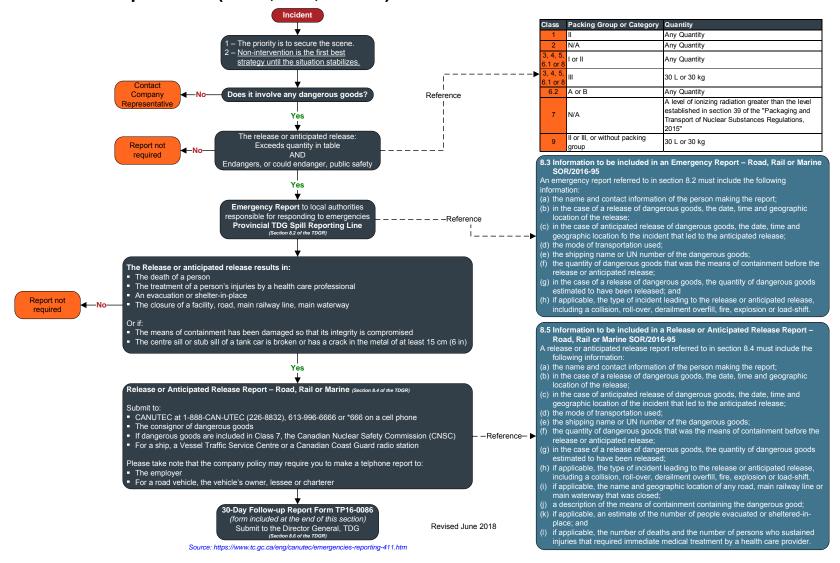
FOREST FIRE / WILDFIRE

•	Evacua	ation trigger point determination needs to be mad	le for non-essential staff
	0	When wildfire reaches a distance of	evacuate all nonessential Production
		Operations/Camp Staff.	
	0	When wildfire reaches a distance of	evacuate all nonessential Drilling Staff.
	0	When wildfire reaches a distance of	evacuate all nonessential Completions
		Staff.	
	0	When wildfire reaches a distance of	evacuate all nonessential Construction
		Staff.	
•	Evacua	ation trigger point determination needs to be made	le for all essential staff
	0	When wildfire reaches a distance of	initiate shutdown procedures evacuate al
		remaining Production Operations/Camp Staff.	
	0	When wildfire reaches a distance of	initiate shutdown procedures evacuate al
		remaining Drilling Staff.	
	0	When wildfire reaches a distance of	initiate shutdown procedures evacuate al
		remaining Completions Staff.	
	0	When wildfire reaches a distance of	initiate shutdown procedures evacuate al
		remaining Construction Staff.	



Transportation Incidents

First On-Scene Transportation (Road, Rail, Marine) Incident Flowchart

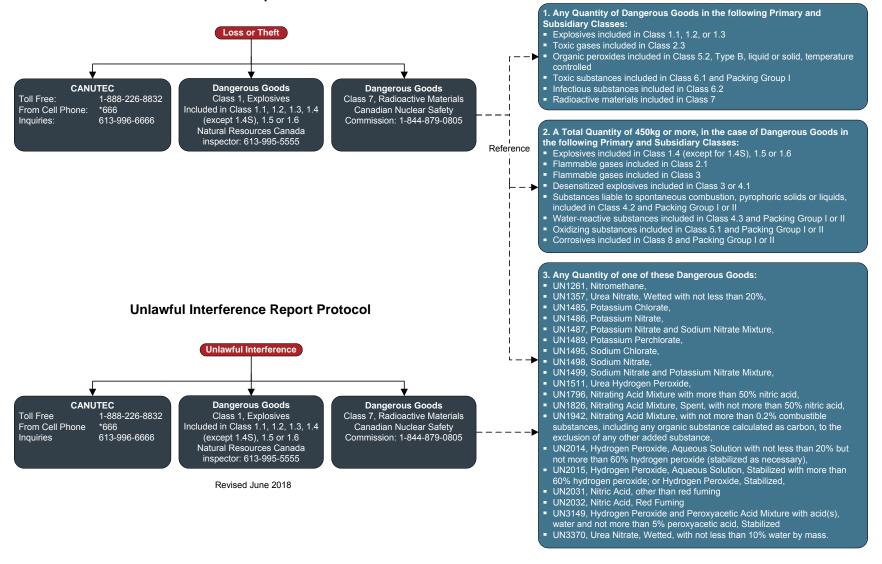




Transportation Incidents, continued

Loss, Theft or Unlawful Interference Reporting Flowchart

Loss or Theft Report Protocol



Transportation Incidents, continued

Motor Vehicle Accidents

The first person on scene will follow the First Person On-Scene Transportation Incident Flowchart, then:

- Record and report the following:
 - o Driver's name, address and phone number.
 - Driver's license number.
 - Vehicle license plate number, make, model, year and colour.
 - Name of injured and nature of injury.
 - Witnesses' name, address and phone numbers.
 - Time and location of accident.
 - Actions taken.
 - Weather conditions.
 - Individuals and organizations notified.
- Make a statement to the RCMP / police.
- Chronologically document all actions, decisions, contacts and requests on an ICS 214 Activity Log (see Section 6: Forms).

The Incident Commander will be engaged through the initial notification and is responsible to:

- Ensure required communication occurs with internal and external personnel.
- Ensure no unauthorized personnel enter the emergency area.
- Ensure evidence is secured for investigation.
- Conduct an initial debriefing to all emergency personnel and delegate areas of responsibility.
- Chronologically document all actions, decisions, contacts and requests on an ICS 214 Activity Log (refer to Section 6: Forms).

In case of a hazardous material spill:

- Ensure your own personal safety.
- Refer to Section 4: Spill Response.

In case of a vehicle fire:

- Ensure your own personal safety.
- Call for assistance.
- Use an ABC fire extinguisher for cab, electrical, cargo space or trunk and engine fires.

Note: RCMP/Police must be notified when an injury or fatality has occurred and / or vehicle damages exceed \$1000.00.

Transportation Incidents, continued

Refer to the Transport Canada - 2016 Emergency Response Guidebook for further details regarding the Initial Phase of a Dangerous Goods / Hazardous Materials Transportation Incident.

Emergency Response Assistance Canada (ERAC) Plan

Internal notification is required in the event of a LPG incident. The extent of the notification depends on the severity of the incident. If the Emergency Response Assistance Canada (ERAC) Plan has been implemented, the incident is considered serious. Examples of serious incidents include: fire, spill, rupture, collision involving tanker car, tanker car overturning, etc.

Notification of an LPG incident outside of a plant site will most likely come from Emergency Response Assistance Canada (ERAC) in Calgary, Alberta.

If the call is NOT from ERAC, contact ERAC immediately and confirm the plan has been initiated.

If you receive the initial call, contact the ERAC:

Refer to Section 5: External Agencies or Area Specific Information for contact information

Refer to the First On-Scene Incident Flowchart on the previous page for information on when to contact.

CANUTEC – Canadian Transport Emergency Centre

CANUTEC is operated by Transport Canada to assist emergency response personnel in handling dangerous goods emergencies involving all modes of transportation.

In an emergency, CANUTEC may be called collect at:

Refer to Section 5: External Agencies or Area Specific Information for contact information

CANUTEC **MUST** be notified in the case of the following:

- Lost, stolen or misplaced infectious substances.
- An incident involving infectious substances.
- An accidental release from a cylinder that has suffered a catastrophic failure.
- An incident where the shipping documents display CANUTEC's telephone number as the emergency number.
- A dangerous goods incident in which a railway vehicle, a ship, an aircraft, an aerodrome or an air cargo facility is involved.

Transportation Incidents, continued Dangerous Goods References

Agency Contacts

Although technical information and emergency response assistance can be obtained from CANUTEC, there are federal and provincial regulations requiring the reporting of dangerous goods incidents to certain authorities.

• Refer to Section 5: External Agencies or Area Specific Information for contact information

Note: The nearest police department must be notified in the case of lost, stolen or misplaced explosives, radioactive materials or infectious substances.

The appropriate federal agencies must be notified if affected:

Refer to Section 5: External Agencies or Area Specific Information for contact information

TDG Reportable Quantities

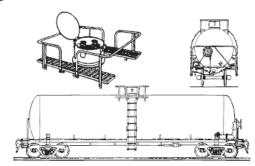
Refer to Petroleum Release Reporting Requirements chart in Section 4: Spill Response.

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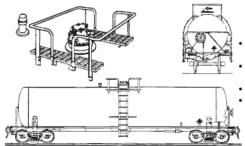


Transportation Incidents, continued Rail Car Identification Chart

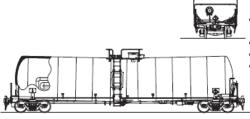
117 Pressure tank car



- For flammable, non-flammable, toxic and/or liquefied compressed gases
- Protective housing
- No bottom fittings
- Pressures usually above 40 psi
- (Iow pressure)

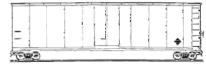


- For variety of hazardous and non-hazardous materials
- Fittings and valves normally visible at the top of the tank
- Some may have bottom outlet valve
- Pressures usually below 25 psi
- 128 Low pressure tank car (TC117, DOT117)

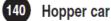


- For flammable liquids (e.g., Petroleum crude oil, ethanol)
- · Protective housing separate from manway
- Bottom outlet valve
- Pressures usually below 25 psi

111 Box car



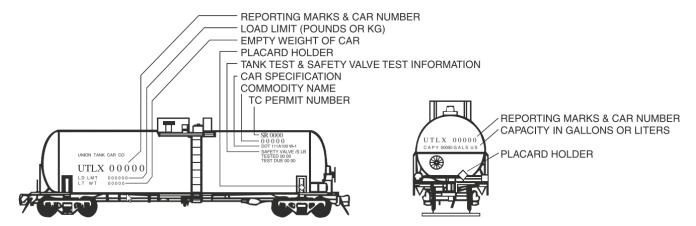
- For general freight that carry bulk or nonbulk packages
- May transport hazardous materials in small packages or "tote bins"
- Single or double sliding door





- For bulk commodities and bulk cargo (e.g., coal, ore, cement and solid granular materials)
- Bulk lading discharged by gravity through the hopper bottom doors when doors opened

Transportation Incidents, continued Rail Car Identification Chart, continued



CAUTION: Emergency response personnel must be aware that rail tank cars vary widely in construction, fittings and purpose. Tank cars could transport products that may be solids, liquids or gases. The products may be under pressure. It is essential that products be identified by consulting shipping documents or train consist or contacting dispatch centres before emergency response is initiated.

The information stencilled on the sides or ends of tank cars, as illustrated above, may be used to identify the product utilizing:

- a. the commodity name shown; or
- b. the other information shown, especially reporting marks and car number which when supplied to a dispatch centre, will facilitate the identification of the product.

The recommended guides should be considered as last resort if the material cannot be identified by any other means.

Source: 2016 Emergency Response Guidebook



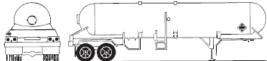
Transportation Incidents, continued

Road Trailer Identification Chart

WARNING: Road trailers may be jacketed, the cross-section may look different than shown and external ring stiffeners would be invisible.

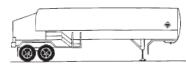
NOTE: An emergency shut-off valve is commonly found at the fornt of the tank, near the driver door.

117 MC331, TC331, SCT331

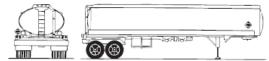


- For liquefied compressed gases (e.g., LPG, ammonia)
- · Rounded heads
- Design pressure between 100-500 psi
- MC338, TC338, SCT338, TC341, CGA341





- For refrigerated liquefied gases (cryogenic liquids)
- · Similar to a "giant thermo-bottle"
- Fitting compartments located in a cabinet at the rear of the tank
- MAWP between 25-500 psi**
- 131 DOT406, TC406, SCT306, MC306, TC306

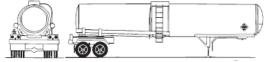


- For flammable liquids (e.g., gasoline, diesel)
- · Elliptical cross-section
- Rollover protection at the top
- Bottom outlet valves
- MAWP between 3-15 psi**

112 TC423

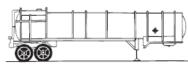


- For emulsions and water-gel explosives
- Hopper-style configuration
- MAWP between 5-15 psi**
- 137 DOT407, TC407, SCT307, MC307, TC307



- · For toxic, corrosive, and flammable liquids
- · Circular cross-section
- May have external ring stiffeners
- MAWP of at least 25 psi**
- 137 DOT412, TC412, SCT312, MC312, TC312

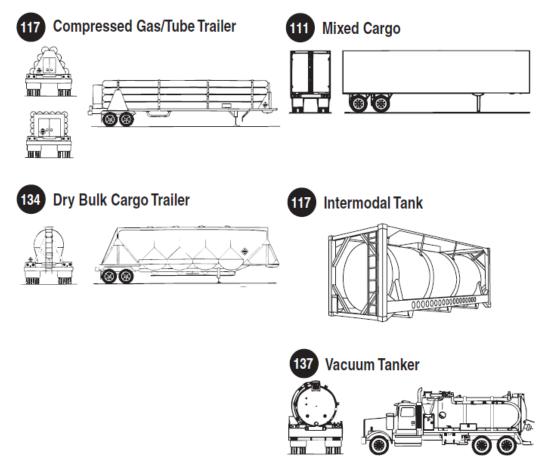




- · Usually for corrosive liquids
- Circular cross-section
- · External ring stiffeners
- Tank diameter is relatively small
- MAWP of at least 15 psi**



Transportation Incidents, continued Road Trailer Identification Chart, continued



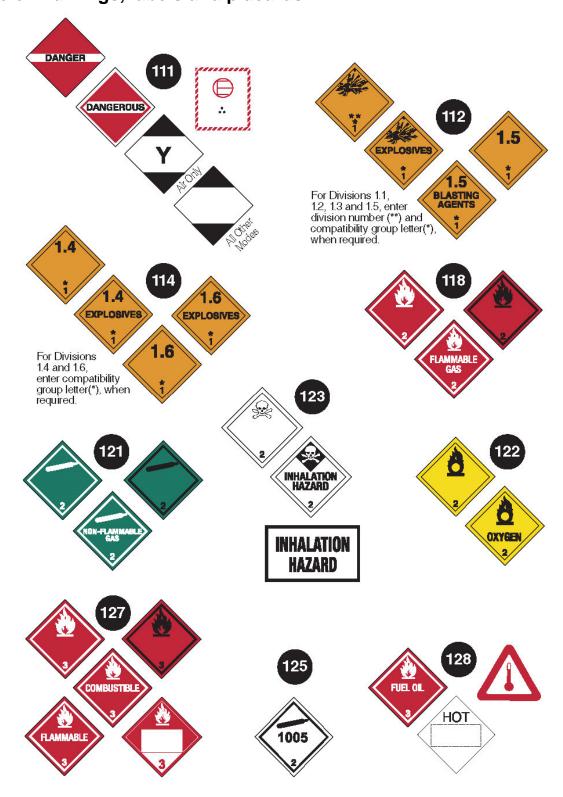
CAUTION: This chart depicts only the most general shapes of road trailers. Emergency response personnel must be aware that there are many variations of road trailers, not illustrated above, that are used for shipping chemical products. The suggested guides are for the most hazardous products that may be transported in these trailer types.

The recommended guides should be considered as last resort if the material cannot be identified by any other means.

Source: 2016 Emergency Response Guidebook

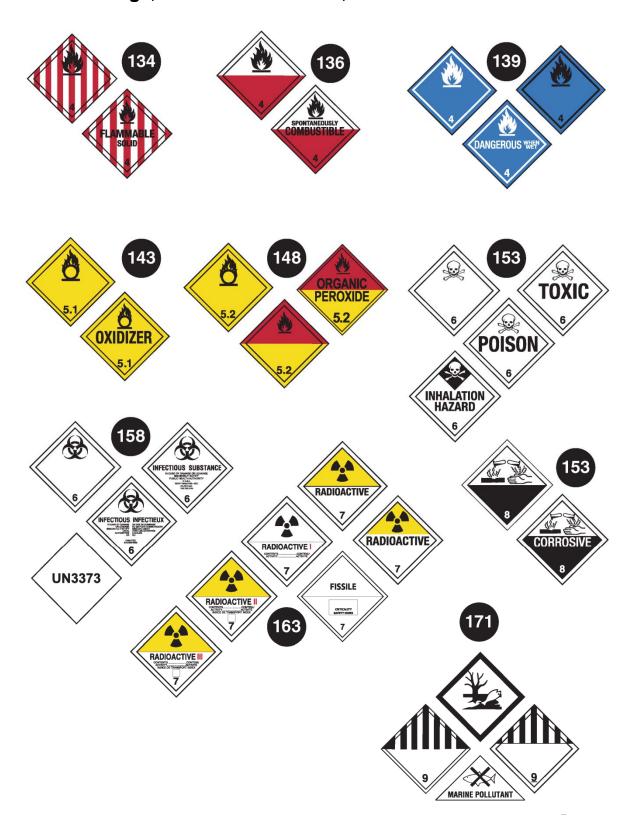


Transportation Incidents, continued Table of markings, labels and placards





Transportation Incidents, continued Table of Markings, Labels and Placards, continued



TRANSPORTATION OF DANGEROUS GOODS 30-DAY FOLLOW-UP REPORT

PART I: REPORTING TIMELINE									
Please provide applicable dates and check one box FOR INTERNAL USE ONLY									
Date of initial report to CANUTE	EC (yyyy-mm-dd):			Marine Reports					
30-Day Follow-up Report subm	ission date (yyyy-mm-dd):		Release	d Pologo					
30-Day Follow-up Repor	- t			Anticipate	u Release				
	o 30-Day Follow-up Report			Air Report					
	Follow-up Report submitted	(vvvv-mm-dd):		Dangerou	s Goods Accident or Incident				
PART II: CONTACT INFORMAT	<u> </u>	(7,7,7 22,7							
2. Information of the person comp									
Consignor Consignee Carrier/Aircraft Operator Other									
First Name	Last Name		Title						
Telephone (999-999-9999)	Company Name								
Address			City		Province/Territory				
					·				
Country	Postal Code (Z9Z 9Z9)	Email			<u> </u>				
	, ,								
3. Information on the Consignor,	L Consignee and Carrier/Airc	aft Operator							
Consignor									
First Name	Last Name		Title						
Telephone (999-999-9999)	Company Name		l						
Address			City		Province/Territory				
Country	Postal Code (Z9Z 9Z9)	Email	I						
Consignee		•							
First Name	Last Name		Title						
Telephone (999-999-9999)	Company Name		1						
Address			City		Province/Territory				
Country	Postal Code (Z9Z 9Z9)	Email							
Carrier/Aircraft Operator									
First Name	Last Name		Title						
Telephone (999-999-9999)	Company Name								
Address	1		City		Province/Territory				
Country	Postal Code (Z9Z 9Z9)	Email	1		,				



PART III: INCIDENT INFORMATION								
4. Please indicate the date and time of the incident								
Date (yyyy-mm-dd)			Time (24-hour system)					
5. Geographic location of the incident								
Address								
City	Province/Territory	Postal Cod	le (Z9Z 9Z9)	GPS Position				
	,		,					
If the incident occured by rail, please in	I dicate the milepost and subd	l ivision	If the incident happened on First Nations Territory, please indicate the Territory name					
Origin of consignment			Destination of	consignment				
Same address as consignor	Same address as consi	gnee	Same add	ress as consignor Same address as consignee				
Other (please provide address):				ase provide address):				
			"	,				
C. Coornantia Area (Chook anticara ha								
6. Geographic Area (Check only one bo	•	_		Maria de la companya del companya de la companya de la companya del companya de la companya de l				
Urban Mixed use – residential, commercia	•	○ Rur Sma		es, agricultural lands Wilderness/Remote Little or no population				
7. Mode of Transport (Check all applica	ble boxes)			_				
Road	Rail		Air	Marine Marine				
8. If MARINE was checked on question fixed facility	7, please indicate the position	on of the ves	sel and the nex	t location at which the vessel will be at anchor or alongside a				
Position			Next location					
9. Phase of Transport (Check only one	box)							
In-Transit Consignment moving between origi			Consignm	ent is being packed or loaded into a means of transport at origin				
Unloading Consignment is being unpacked or	unloaded from a		Consignm	ry Storage ent is in short term storage pending transportation				
means of transport at destination								
10. Type of Incident (Check all applicab	ole boxes)							
Collision/Sideswipe Moving vehicles striking an object, a	animal, or another vehicle		Derailmer Railcar lea	nt aving the rail tracks				
Ran off road Vehicle enters a soft shoulder, ditch	n or similar area		Overturn Vehicle tu	rning on its side or upside down				
Loadshift Shifting of the consignment within a	vehicle		Dropped Means of	containment falling unexpectedly				
Struck Means of containment being struck	by another object		Other (PI	ease specify):				
11. Type of Release (Check all applicate	ole boxes)							
Spill Quick, immediate discharge, emissi	on or escape		Leak Slow, spor	radic or continuous discharge, emission or escape				
Explosion Violent sudden release of energy freshock wave that may result in fragn			Fire Burning su and smoke	ubstances combined with oxygen to typically produce flame, heat				
BLEVE Boiling Liquid Expanding Vapour Ex	xplosion		normal sta					
Venting Controlled release of gas into the en	nvironment		Distressed	ed Release I means of containment that is not leaking, venting or otherwise ts contents				



12. Informat	ion on the Dangero	us Goods										
UN Number	Shippin Name	g	Primary Class	Subsid Class(Packing Group or Category	Before the	ntity in MOC Release or ed Release	Units (kg, L, etc.)		timated Quantity Released (if applicable)	Units (kg, L, etc.)
13. Means of Containment												
-	ide a description of	the means of	f containmer	nt involve	d in t	he incident by	completing	the appropri	ate forms from	Annex	E of the Guide (TF	P15294)
	ONSEQUENCES											
14. Consequ	uences of the incide	ent (Check all	l applicable b	oxes)								
NOTE: Refe	er to the Guide for m	nore informati	ion on how t	o comple	te thi	s section						
Human		(e.g. produc		y, equipm	nent)	En	vironmental	(e.g. contan	ination of wate	erway,	ground, air)	
	ion of people and b	_		~		~						
	n Evacuation as a r		· ·	Yes) No						
	Shelter in place as a se complete the follo		incident? (Yes) No						
100, p.oa.	o complete and lone	- I	te Residenc	•		Public Ruil	dinge					
	on of People and /Shelter in Place	Includes I buildings	houses and used as dwe tirement hon	d other Includes libraries, hospitals, rellings churches, government In			Includ	Workplace cludes warehouse, facility, etc.		Public (Outside) Areas Includes parks, playgrounds, parking lots, etc.		
Estimated n evacuated	umber of people	(* 3				<u> </u>						
Estimated n	umber of people n place											
Estimated n buildings e												
Size of Evad	cuation area (square	e meters)	Du	Duration of Evacuation (hours)					Duration of She	elter in	place (hours)	
16. Injuries a	and/or deaths											
Were there	any injuries and/or o	deaths?	Yes (pleas	se comple	ete th	ne following ta	able) () No				
Minor Injuri	ies Yes	○ No										
Number of injured requiring immediate first aid treatment at the scene Attributed to Dangerous Goods Attributed to incident Total												
Moderate In	njuries Yes	○ No						'				
Number of	injured requiring in	mmediate er	mergency tr	eatment	in h	ospital and re	elease short	ly after				
Attributed to Dangerous Goods Att				Attributed to incident					Total			
Major Injuri	es Yes	○ No										
	injured requiring in Dangerous Goods			h overni g tributed to	_		on		Total			
Deaths	○ Yes	○ No										
Number of Attributed to	deaths Dangerous Goods	-	Att	ributed to	o inci	dent			Total			



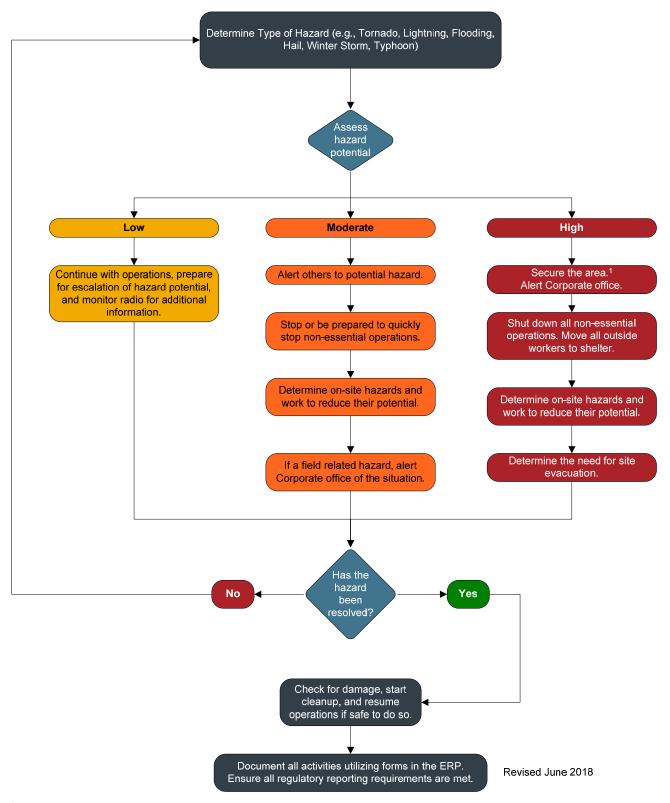
17. Please indicate an es	stimate of costs	in Canadian	dollars associated	with the	incident, as applicable				
NOTE: Refer to the Guid	le for more inform	mation on ho	w to fill this sectio	n					
Material loss of dangerous goods	Damage incur the carrier	red by	Property damage		Emergency response cost	Clean-up	cost	Total cost	
18. Infrastructure closure	and duration (p	lease use ad	Iditional sheets fo	r multiple	closures)				
Was there an infrastructu	ure closure as a	result of the	incident?	Yes	○ No				
If Yes, please complete t	the following tab	le							
			Туре				Dura	ation of the closure (in hours)	
					whole or in part for arriv iipment situated thereor				
Air cargo facility – F	Facility used to re	eceive or trar	nsfer cargo carrie	d or to be	carried by an aircraft				
Facility – Permanent dangerous goods	t or temporary b	uilding or a p	ortion of a buildin	g or equi	pment used in loading o	r unloading	of		
Railway – Tracks use	ed by trains								
Waterway – Navigab	ole body of water	r through whi	ch a ship or boat	can move	e				
Roadway – The strip multiple lane freeway		nich motor ve	hicles circulate, s	uch as di	rt road, numbered provi	ncial highwa	ay or		
Runway – the strip of	of ground on a la	inding field th	at aircraft use for	landing o	or takeoff				
19. Geographic location	of closure								
Address									
City		Province/Ter	ritory	Postal	Code (Z9Z 9Z9)	GPS Posi	tion		
If the incident occured by	/ rail, please indi	icate the mile	post and subdivis	sion	Name of facility, road,	railway or v	vaterway		
20. ERAP Requirements	,								
Was an ERAP required u	under Part 7 of th	ne <i>Transpor</i>	tation of Danger	ous Goo	ds Regulations?	O Yes	○ No		
If Yes, please complete t	the following tab	le							
ERAP Reference Number	er		ERAF	Holder					
Address	Address								
City		Province/Ter	ritory		Postal Code (Z9Z 9Z9	9)	Telephone of F	ERAP Holder (999-999-9999)	
Only		1 10vii100/101	THOTY		1 00101 0000 (202 020	′)	Telephone of E	-10 ti 1101del (000 000 0000)	
Email									
Level of Response (chec	Level of Response (check all that apply)								
No response									
Other:									



PART V: INCIDENT DESCRIPTION									
21. Please describe:									
The sequence of events that led to the incident The means of containment damage or failure, including the size/location of hole	es. cracks. etc.								
The actions taken at the time it was discovered	,,								
What was done to mitigate the effects of the release									
Contributing factors (e.g. human error, mechanical, equipment, packaging, infra The physical environment (e.g. residential, commercial, industrial, etc.)	astructure, external, weather, etc.)								
• The road's appearance (e.g. flat, straight, inclined, curved, intersection, etc.)									
• Timeline of event (e.g. how long it lasted, time of release or discovery, time of f	irst responder arrival, etc.)								
Communications with first responders and with your organization									
Photographs and diagrams should be submitted, as required, for clarification. Es necessary.	timate the duration of the release, if possible. Please use additional sheets if								
NOTE: Refer to the Guide for more information on how to complete this section									
PART VI: INCIDENT DESCRIPTION – AIR ONLY									
22. Please describe:									
Any serious jeopardy to persons on any aircraft or aircraft itself									
Any damages to property or environment									
• The route by which the dangerous goods were to be or have been transported,	including the name of any aerodromes along the route								
Aircraft Operator	Air Cargo Facility								
	1								



Weather and Natural Disasters



¹ The primary concern is for human life. If time allows and it is safe to do so, secure the area (tie down / secure objects that could be moved and cause additional damage).



Weather and Natural Disasters, continued

Severe storms can occur in Canada year round. In the months between May and September, hot and humid weather combined with a cold front could be a sign that a severe storm is brewing. A severe storm can create lightning, hail, severe rain fall (flooding), high winds and tornados. In the months between October and April, severe storms could include blizzards, freezing rain, heavy and blowing snow.

The weather office will issue through the use of radio and television repeated weather watches and warnings. The only exception to these warnings is earthquakes, since they occur by surprise and cannot be predicted.

Listen for the Warnings

Environment & Climate Change Canada (ECCC) monitors the weather 24-hours a day, seven days a week. If a severe storm is on the horizon, the weather service issues watches, advisories and warnings for that specific storm through national, regional and local radio and television stations, and through ECCC Weatheradio.

Weather Watch

This means conditions are favourable for a severe storm, even though nothing has developed yet. It does not mean that the storm will occur. A Weather Watch is usually issued early in the day; keep monitoring weather conditions and listen for updated statements.

Weather Warning

This means severe weather is happening or hazardous weather is highly probable. If the warning is for your area, take precautions immediately and listen to your radio for constant updates.

Earthquake

General Information

An earthquake (also known as a quake, tremor, or tremblor) is caused by a sudden slip on a fault, which in turn, releases energy in waves that travel through rock to cause the shaking that we feel during an earthquake.

An earthquake cannot be prevented or predicted, but it can be mitigated. The effects of earthquakes include, but are not limited to, shaking and ground rupture. Most common effects or impacts of an earthquake are shaking and ground rupture. Depending on the magnitude of an earthquake, these may cause damage to buildings, pipelines and other rigid structures.

During an Earthquake

Be aware that some earthquakes are actually foreshocks and a larger earthquake might occur. Minimize movement to a few steps to a nearby safe place and stay indoors until the shaking has stopped and exiting is safe.



Weather and Natural Disasters, continued

If indoors

- DROP to the ground; take COVER by getting under a sturdy table or other piece of furniture; and HOLD ON until the shaking stops. If there isn't a table or desk near you, cover your face and head with your arms and crouch in an inside corner of the building.
- Stay away from glass, windows, outside doors and walls, and anything that could fall, such as lighting fixtures or furniture.
- Use a doorway for shelter only if it is in close proximity to you and if you know it is a strongly supported, load bearing doorway.
- Stay inside until shaking stops and it is safe to go outside. Research has shown that most injuries occur when people inside buildings attempt to move to a different location inside the building or try to leave.
- Be aware that the electricity may go out or the sprinkler systems or fire alarms may turn on.
- DO NOT use the elevators.

If outdoors

- Stay outdoors and move away from buildings, streetlights, and utility wires.
- Once in the open, stay there until the shaking stops. The greatest danger exists directly outside buildings, at exits, and alongside exterior walls. Ground movement during an earthquake is seldom the direct cause of death or injury. Most earthquake-related casualties result from collapsing walls, flying glass, and falling objects.

If in a moving vehicle

- Stop as quickly as safety permits and stay in the vehicle. Avoid stopping near or under buildings, trees, overpasses, and utility wires.
- Proceed cautiously once the earthquake has stopped. Avoid roads, bridges, or ramps that might have been damaged by the earthquake.

If trapped under debris

- Do not light a match.
- Do not move about or kick up dust. Cover your mouth with a handkerchief or clothing.
- Tap on a pipe or wall so rescuers can locate you. Use a whistle if one is available. Shout only as a last resort. Shouting can cause you to inhale dangerous amounts of dust.



Weather and Natural Disasters, continued

Floods

The potential for overland flooding can create a high level of risk for facility damage and environmental impact at petroleum facilities. While there is little that can be done to prevent flooding, actions can be taken to minimize the impact.

It is important to consider that your facility may play a vital role in fuel supply during an emergency situation. It is therefore important that you and the government authority having jurisdiction during a flood emergency have regular and clear communication with regards to facility closure.

To shut down a facility which may be flooded:

- 1. Take a product inventory reading of all underground and aboveground tanks, including water level readings.
- 2. Seal fill pipe caps to prevent water from entering underground tanks. Close all valves to above ground tanks. DO NOT PLUG OR SEAL TANK VENT LINES.
- 3. Underground tanks should be kept as full of product as possible. Above ground tanks should be filled to a level at least 25% above the estimated/predicted floodwater elevation.
- 4. Ensure that above ground tanks which could float away are secured or tethered in a manner that would prevent floating from the property.
- 5. Seal all drains in tank lots.
- 6. Oil/water separators and product sumps should be skimmed of product using sorbent pads or vacuum trucks as appropriate. Spent sorbent pads should be drummed and every effort must be made to remove any waste from the expected flood zone. If time does not allow for removal the drums must be secured to prevent them from floating away. Close the oil/water separator drain valve.
- 7. Drums and lubricant cubes should be tied down or otherwise secured to prevent floating.
- 8. Propane facilities contact your propane supplier for appropriate flood emergency procedures.
- Secure used oil collection cabinets. Every effort must be made to remove all waste oil from the expected flood zone. If waste oil from the cabinet drains to a waste oil underground tank, ensure the connection is tight.
- 10. Secure containers of chemicals, cleaning agents, pesticides, etc. Every effort must be made to remove these products from the expected flood zone. If they cannot be moved to a safe location, store these containers at high elevations in a manner that prevents them from floating off the property or leaking into floodwaters.
- 11. If the facility is to be closed/evacuated, shut down electrical power to the site at the main breaker. Contact the power service utility company to determine if the power service to the facility is going to be cut-off.
- 12. Shut down other utilities to the site including natural gas and potable water. If water is obtained from a water well, secure the well using a well seal.
- 13. Shut down all appliances, including hot water tanks, furnaces, etc.
- 14. Lock all doors and gates to the facility.
- 15. Post a sign in a prominent location identifying the names and telephone numbers where key company personnel can be contacted during the emergency.



Weather and Natural Disasters, continued

To start-up a facility which has been flooded:

- 1. Re-activate utilities to the site (natural gas, water, electricity) and appliances using qualified utility service personnel, where required.
- 2. Take product inventory readings and water dips of all tanks to determine if product has leaked out from the tanks or water has entered the tanks.
- 3. Take appropriate measures to test product quality.
- 4. Propane facilities contact your propane supplier for recommissioning your propane facilities.
- 5. Pump out water from sumps and containment pans using a qualified petroleum contractor.
- 6. Follow all re-entry procedures and requirements for health and safety as provided by your local government authority (disinfection, potable water testing, etc.).

Government agencies monitor weather patterns, precipitation and provincial water levels and flows. They provide a comprehensive series of public advisories about potential flooding. These include river stage-up advisories, ice-jam warnings, high stream flow advisories, flood watches and flood warnings; for more information visit the following websites:

Alberta	Alberta Environment
	http://environment.alberta.ca/forecasting/advisories/
British Columbia	Ministry of Forests, Lands and Natural Resource Operations – River Forecast Centre
	http://bcrfc.env.gov.bc.ca/warnings/index.htm
Manitoba	Government of Manitoba – Flood Information
	http://www.gov.mb.ca/flooding/index.html
Saskatchewan	Saskatchewan Watershed Authority
	https://www.wsask.ca/Lakes-and-Rivers/Stream-Flows-and-Lake-Levels/

What to do during a flood

- Gather essential items together in a high place.
- Collect things needed for evacuation.
- Stack sandbags, if possible, to form a barrier to hold back or redirect moving water from critical areas.
- Turn off gas, electricity and water supply if it is safe to do so.
- Avoid electricity sources.
- Avoid walking or driving through flood water.



Weather and Natural Disasters, continued

Thunderstorm and Lightning Safety

A lightning bolt carries up to 100 million volts of electricity. When someone is struck by lightning, an electrical shock occurs that can cause burns and even stop the person's breathing. Although thunder and lightning can occur occasionally during a snowstorm, April to October are the prime thunderstorm months in Canada. Thunderstorms occur most often in late afternoon or evening, and around sunrise.

Knowing how lightning behaves can help you plan for an approaching storm. It tends to strike higher ground and prominent objects, especially materials that are good conductors of electricity, such as metal. Thunder can be a good indicator of lightning - loud crackling means its close, whereas rumbling means the storm is further away.

Because light travels faster than sound, you will see lightning before you hear the thunder. Each second between the flash and the thunderclap represents about 300 metres. If you can hear thunder, you are within striking distance. Immediately go inside, there is NO safe place to be outside in a thunderstorm.

Protection from lightning begins before the storm. Paying attention to weather conditions and forecasts allows time to plan for threatening weather and to react appropriately.

What to do during a thunderstorm

The safest place to be during a thunderstorm is in a building that is fully enclosed with a roof, walls and floor with electrical wiring, plumbing, telephone line, or antennas to ground the lightning should the building be hit directly. Unsafe shelters are buildings or structures without electricity or plumbing to ground the lightning, as they do not provide any lightning protection. Shelters that are unsafe include covered picnic shelters, carports, tents, baseball dugouts as well as other small non-metal buildings (sheds and greenhouses).

Even when inside the building, there are safety precautions to take:

- Keep as many walls as possible between you and the outside. Stay away from doors, windows, and fireplaces.
- Stay away from anything that will conduct electricity such as radiators, stoves, sinks and metal pipes.
- Use battery operated appliances only. Avoid handling electrical appliances and regular telephones (cordless phones and cell phones do not increase the risk of a lightning strike).

The next best place for shelter is an enclosed metal car, truck or van but NOT a tractor, golf cart, topless or soft-top vehicle. Make sure the vehicle is not parked near trees or other tall objects that could fall over during a storm. When inside a vehicle during a lightning storm, roll up the windows and sit with your hands in your lap and wait out the storm. Don't touch any part of the metal frame or any wired device in the vehicle (including the steering wheel or plugged-in cell phone). A direct strike to your car will flow through the frame of the vehicle and usually jump over or through the tires to reach ground.

What to do if you cannot find shelter

There is no safe place to be outdoors during a thunderstorm. However, to reduce the risk of being struck by lightning when outside, stay away from things that are tall (trees, flagpoles or posts), water, and other objects that conduct electricity (tractors, metal fences, lawn mowers, golf clubs). Do not become a target by being the highest object on the landscape. If you are with a group of people in the open, spread out several metres apart from one another.

If you get caught in a level field far from shelter, crouch down on the balls of your feet immediately, with feet together, place your arms around your knees and bend forward. Be the smallest target possible, and at the same time, minimize your contact with the ground. Don't lie flat.



Weather and Natural Disasters, continued

If someone has been hit by lightning

Lightning victims are safe to touch. Bystanders shouldn't hesitate to save a life by calling for help. If breathing has stopped, administer mouth-to-mouth resuscitation. If the victim is not breathing or they do not have a pulse, a trained rescuer should administer cardiopulmonary resuscitation (CPR).

Tornados

A tornado is nature's most violent form of storm activity. It can produce upwardly spiraling winds of 120 to 450 km/h, producing devastating damage along a path of 50 to 300 metres in width. The forward motion of the tornado funnel may be quite erratic as it zigzags along a southwest to north-easterly direction (usually) at a forward speed of 50 to 70 km/h.

Hot, humid weather combined with a cold front could be a sign that a tornado is brewing, and a funnel cloud hanging from a dark cloud may be visible before the tornado actually occurs (a funnel cloud is not a tornado until it touches the ground). The sound has been described as a tremendous roar which sounds like an express train or jet aircraft (only louder). Clouds may be green or yellow tinged. There is usually a noticeable lowering of a portion of the cloud that contains a large, swirling, turbulent mass from which the funnel will hang (funnel cloud).

Protecting yourself during a tornado

- Have a radio on to listen for warning information or advice.
- Determine an appropriate shelter (select a shelter area that would offer protection, such as
 underneath a stairway and is secured to the main floor). The shelter must be easily accessible and
 able to offer protection from flying glass, debris and furniture. (Decide on shelter options in advance,
 for your place of employment.) If forced to take shelter away from the plant avoid large halls or any
 large building with large span roofs. Seek out an inner hallway, washroom, closet, etc.
- Stay away from windows.
- Avoid travelling any great distance so that you will not be caught out in the open.
- If the storm warning is issued for your immediate area, go to your designated shelter.
- If caught outdoors and you cannot reach shelter, lie flat in a ditch, excavation or culvert. If possible, lay flat, holding the base of a small tree, bush or shrubbery to avoid being lifted or blown away.
- If caught while driving, drive away from the funnel at a right angle or to its direction of travel (if possible). If you cannot escape the path of the funnel, get out of your vehicle immediately and seek shelter in a ditch or ravine, keeping its slope between you and the funnel.
- If caught away from the plant, seek shelter in a sturdy building. Go to an interior hallway or washroom on the lower floor, and stay away from windows.

Winter Storms: Blizzards, Freezing Rain, Heavy Snow, Blowing Snow

General Information

Blizzards come in on a wave of cold arctic air, bringing snow, bitter cold, high winds, and poor visibility in blowing snow. These conditions must last for a minimum of six hours to be designated a blizzard and they may last for several days. Poor visibility, low temperatures and high winds constitute a significant hazard.



Weather and Natural Disasters, continued

Freezing rain occurs when the air in an upper-air layer has an above-freezing temperature, while the temperature at the surface is below freezing. The snow that falls melts in the warmer layer; as a result, it is rain—not snow— that lands on the surface. But since the temperature is below 0°C, raindrops freeze on contact and turn into a smooth layer of ice. More slippery than snow, freezing rain is tough and clings to everything it touches. A bit of freezing rain is dangerous; a great deal of it can be catastrophic.

Things to do during a severe winter storm or if a storm is forecast

- Stay calm and leave your radio on to stay informed of the situation and hear updated forecasts.
- Stay indoors. If you must go out, dress for the weather.
- Secure everything that might be blown around or torn loose indoors and outdoors (flying objects can injure people and damage property).
- If you are outdoors when a storm hits, take shelter immediately.

Winter Weather Warnings	Issued
Blizzard Warning	When winds of 40 km/hr or greater are expected to cause widespread reductions in visibility to 400 metres or less, due to blowing snow, or blowing snow in combination with falling snow, for at least 4 hours.
Freezing Rain Warning	When freezing rain is expected to pose a hazard to transportation or property; or when freezing rain is expected for at least 2 hours.
Snowfall Warning	When 10 cm or more of snow is expected to fall within 12 hours.
Wind Warning	70 km/h or more sustained wind; and/or Gusts to 90 km/h or more.
	Issued to warn of conditions that will cause frostbite to exposed skin. Criteria vary across the country, ranging from wind chill values of -55 in some Arctic regions to -30 in South-western Ontario. A national wind chill program is in development.
Wind Chill Warning	For wind chill values:
	-27 to -44risk of frostbite and risk of hypothermia increases with time spent outdoors
	-45 or lowerexposed flesh may freeze in minutes and there is a serious risk of hypothermia
	When severe and potentially dangerous winter weather conditions are expected, including:
Winter Storm Warning	A major snowfall (25 cm or more within a 24 hour period); and
Thines Sterm Harming	A significant snowfall (snowfall warning criteria amounts) combined with other cold weather precipitation types such as: freezing rain, strong winds, blowing snow and/or extreme wind chill.

Source: Environment & Climate Change Canada (ECCC), Public Alert Criteria

http://www.ec.gc.ca/meteo-weather/default.asp?lang=En&n=D9553AB5-1



Weather and Natural Disasters, continued

After a Disaster

These are general guidelines to look for after an occurrence:

- Assess site and declare an emergency as required.
- Activate ERP as required.
- Account for all on-site and field personnel.
- Listen to a battery-operated radio or television for the latest emergency information.
- Give first aid to the injured and call for medical assistance if required. Do not move seriously injured
 persons unless they are in immediate danger of further injury. Use intrinsically safe flashlights to
 survey for damage and look for victims. Do not use candles or matches (explosion hazards may
 exist).
- Use the telephone for emergency calls only.
- Check for spilled medicines, bleaches, gasoline or other flammable liquids.
- Open cabinets cautiously. Beware of objects that can fall off shelves.
- Report fires to the fire department. Be alert to prevent fires, as broken water mains may cause a
 reduction in water pressure. Lightning and downed power lines can cause fires. Know how to fight
 small fires.
- Inspect utilities.
 - Look for electrical system damage. If you see sparks or broken or frayed wires, or if you smell hot insulation, turn off the electricity at the main fuse box or circuit breaker. Do not go near loose or dangling power lines. If you have to step in water to get to the fuse box or circuit breaker, call an electrician first for advice.
 - Check for sewage and water lines damage. If you suspect sewage lines are damaged, avoid using the toilets and call a plumber. If water pipes are damaged, contact the water company and avoid using water from the tap. You can obtain safe water by melting ice cubes.
 - Check for leaking pipes. If you smell sour gas:
 - Immediately evacuate the area and don appropriate personal protective equipment.
 - Close gas valves and isolate the area.
 - Turn off the main power switch (only if you are NOT wet or standing in water).
 - Shut down required plant and well sites and notify appropriate government authorities.
 - Check buildings prior to entering as there may be structural damage; proceed cautiously.
- In the case of a flood, proper cleanup is essential. Discard all materials that cannot or should not be saved. Wash and rinse all surfaces, then disinfect them. Remove any water as soon as possible and clean out mud and other debris. Water supplies may be contaminated; use caution with drinking water.
- In the case of an earthquake, expect aftershocks. These are usually less violent than the main quake but can be strong enough to do additional damage to weakened structures and can occur in the first hours, days, weeks, or even months after the quake.

Note: The emotional impacts of disasters on those affected can be distressing and lasting, even if it doesn't involve physical harm. Help by maintaining a positive attitude and a sense of calmness. Your local health authority can assist in coping with trauma resulting from a disaster.



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Security Incidents

A security incident is a security-related occurrence, threat or action that has adversely affected people, the environment, assets and economic stability, or could potentially do the same.

General Notes on Prevention of Security Incidents

As defined in the CSA Standard Security Management for Petroleum and Natural Gas Industry Systems (Z246.1-17), a Security Management Program should be implemented to ensure security incidents and threats are identified and managed with appropriate safeguards and response procedures in place.

This documented security risk management process should incorporate threat, vulnerability, risk assessment and asset characterization. Asset characterization, in particular, identifies and ranks any assets that could result in adverse consequences if damaged or destroyed.

To minimize the possibility of threats within a company property, an adequate physical security system must be in place. This should include the following:

- Perimeter fencing and gates to protect against unauthorized entry into a facility gates should be closed when not in use and locked when unoccupied
- Appropriate signage at the perimeter and entrances
- Intrusion detection systems / alarm systems
- Sufficient lighting in darkness or areas of poor visibility
- Pedestrian access control
- Security guard force, both static and mobile
- Employee awareness

Types of Security Threats

Security-related threats have the intent to cause harm and could include bomb threats, suspicious packages, terrorism, vandalism, trespassing and cyber-attacks.

Responding to Threats

Should any facility or office be the subject of a threat, or be advised of the potential of a terrorist attack, or of the potential of an attack to an adjoining facility being operated by another company, the person receiving the initial threat should remain calm, document all information in writing and notify his supervisor immediately. The supervisor should make an immediate assessment of the circumstances then:

- Obtain all data from the person who received the threat.
- If there is clear and imminent danger, the plant should be immediately evacuated, and the Field Response Team activated from a remote location.
- Contact local police / Royal Canadian Mounted Police (RCMP).
- Notify the Regulatory Agency and the EOC Director.



Security Incidents, continued

Once the Field Response Team is activated, the Field Response Team Incident Commander and a senior company representative will consider the threat and options available to respond to the threat. There area myriad of potential short and long term responses available and they will be dependent on the evaluation of the threat, time available to respond, resources available locally or that can be brought in a reasonable time, and police and military resources available.

• If the threat is considered possible, the Canadian Security Advisor recommends that the following immediate/short term responses should be considered:

Field Operations:

- Establish intelligence liaison with local authorities (e.g. police).
- Report all suspicious activity to Corporate Security.
- Discontinue all site tours and visits.
- Restrict vehicle access to specifically authorized vehicles only.
- ID all visitors seeking access.
- Assign a person to patrol the perimeter of the facility at the beginning of each operational shift and note any deficiencies; look for signs of attempted break and enter.
- Conduct an evacuation exercise.

Remotely Operated Facilities (also applies to any facility operated by a single person):

- Establish full lock down on fences and assets on the lease/site everything that can be secured and locked is secured and locked.
- Conduct a fence perimeter patrol before entering the site look for signs of illegal entrance.
- Conduct a full exterior building patrol before entering a building look for signs of unlawful entrance (doors pried, windows open, broken glass etc.).
- When working, lock the gates upon entering and leaving the facility, and rigidly adhere to the work alone guidelines.

Bomb Threats

Bomb threats are delivered in a variety of ways. The majority of threats are called in to the target, though occasionally these calls are through a third party. Sometimes a threat is communicated in writing, or by a recording.

Persons making bomb threats generally have one of two motivations:

- 1. The caller has definite knowledge or believes that an explosive or incendiary bomb has been, or will be, placed. He or she wants to minimize personal injury or property damage. The caller may be the person who placed the device or someone who has become aware of such information.
- 2. The caller wants to create an atmosphere of anxiety and panic which will, in turn, result in a disruption of the normal activities at the location where the device is purportedly placed.

While most bomb threats are unfounded, some are not. As such, each one must be dealt with as though it is real and handled seriously and calmly.



Security Incidents, continued

Bomb Appearance

Bombs can be constructed to look like almost anything, and can be placed or delivered in any number of ways. The probability of finding a bomb that looks like the stereotypical bomb is almost non-existent. Most bombs are homemade, and are limited in their design only by the imagination and resources available to the bomber.

Remember, when searching for a bomb, suspect anything that looks unusual. Ultimately, however, let a trained bomb technician determine what is or is not a bomb.

Responding to Bomb Threats over the Phone

Most threats or implied threats are received by telephone, generally at a publicized or switchboard number. Should that occur, obtain as much information as possible, filling out the Threatening Call / Bomb Threat form (Section 6: Forms).

If a bomb threat is received over the telephone, the employee receiving the phone call should take the following actions:

- Stay calm and keep their voice calm.
- Pay close attention to details. Write information down as the caller says it. Attempt to get the following
 information from the caller:
 - o What type of bomb is being used?
 - o Did you place the bomb?
 - o Who is the target?
 - o Where has the bomb been placed?
 - o What time is the bomb set to explode?
 - o Why was the bomb placed?
 - o What type of container is the bomb placed in?
 - What does it look like?
 - o What is the bomber's name?
 - o What is the bomber's address?
- While the first employee is dealing with the threatening phone call, they should have a co-worker or another person contact the police (dial 911) using another telephone, and as covertly as possible. As the first employee writes down answers to the questions above, these answers should be relayed to the police.
- The call recipient should attempt to keep the caller on the phone.
- The call recipient should note the caller's:
 - Age and gender
 - o Emotional state (angry, agitated, calm, etc.)
 - Speech patterns (accent, tone)
 - Background noise (traffic, people talking and accents, music and type, etc.)

Responding to Bomb Threats Received in Writing

If a threat has been received in writing, minimize the handling of the document to ensure preservation of forensic evidence - DO NOT PHOTOCOPY.



Security Incidents, continued

Supervisor Responsibilities after Receiving a Bomb Threat

The supervisor should then:

- Obtain all data from the person who received the threat
- Activate the ERP if the situation warrants
- Contact local police / Royal Canadian Mounted Police (RCMP) if this has not already been done
- Notify the Regulatory Agency
- Decide on partial or total evacuation (if needed)
- Decide on partial or total search of the facility (if needed)

Evacuating the Facility

If it seems prudent to evacuate the building:

- Have all employees briefly check their work areas for unfamiliar items.
- Instruct all employees not to touch suspicious items, but simply to report them to their supervisors (taking pictures if feasible).
- Instruct all employees not to take personal belongings when they leave.
- Leave doors and windows open
- Do not to turn light switches on or off.
- Do not activate the fire alarm.
- Use stairs only; do not use elevators.
- Use of radio communications should be restricted as the signal could detonate a device.
- All evacuees should report to an outside pre-designated muster area for accountability.

IED Evacuation Distances

Improvised Explosive Device (IED) SAFE STAND OFF DISTANCE

	Threat Description	Explosives Mass (TNT equivalent)¹		Building Evacuation Distance ²		Outdoor Evacuation Distance ³	
	Pipe Bomb	5 lbs	2.3 kg	70 ft	21 m	850 ft	259 m
int)	Suicide Belt	10 lbs	4.5 kg	90 ft	27 m	1,080 ft	330 m
ivale	Suicide Vest	20 lbs	9 kg	110 ft	34 m	1,360 ft	415 m
T Equ	Briefcase/Suitcase Bomb	50 lbs	23 kg	150 ft	46 m	1,850 ft	564 m
NE.	Compact Sedan	500 lbs	227 kg	320 ft	98 m	1,500 ft	457 m
sives	Sedan	1,000 lbs	454 kg	400 ft	122 m	1,750 ft	534 m
soldx	Passenger/Cargo Van	4,000 lbs	1 814 kg	640 ft	195 m	2,750 ft	838 m
High Explosives (TNT Equivalent)	Small Moving Van/ Delivery Truck	10,000 lbs	4 536 kg	860 ft	263 m	3,750 ft	1 143 m
I	Moving Van/Water Truck	30,000 lbs	13 608 kg	1,240 ft	375 m	6,500 ft	1 982 m
	Semitrailer	60,000 lbs	27 216 kg	1,570 ft	475 m	7,000 ft	2 134 m



Security Incidents, continued

Bomb Search Guidelines

Employees must not touch anything - only law enforcement explosive disposal units or qualified private consultants are qualified to search for a bomb or suspicious package.

In the event of a search, however, employees may be called upon to unlock drawers, cabinets, and the like for the search crew, and to identify any strange or unfamiliar objects.

Explosive Device Located

If a device or suspected device is located:

- Do not touch or move the object.
- Evacuate the immediate area.
- If possible, take steps to minimize effects of an explosion in the vicinity by evacuation or isolation of the area.
- Ensure RCMP are apprised of the location so explosive disposal unit can be called.

If there is an Explosion

- Have employees take cover under sturdy furniture, or leave the building if directed to do so by emergency responders.
- Stay away from windows.
- · Do not light matches.
- Move well away from the site of the hazard to a safe location.
- Use stairs only; do not use elevators.
- Call 911 if no one has called.

Suspicious Packages

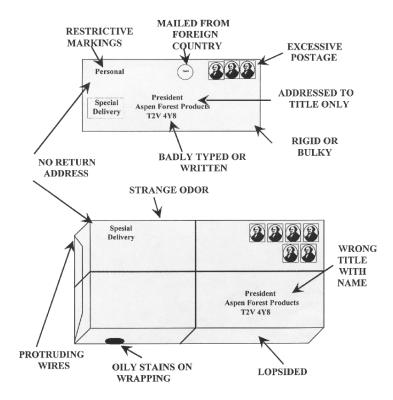
The likelihood of receiving a bomb in the mail is remote. Unfortunately, however, a small number of explosive devices have been mailed over the years resulting in death, injury and destruction of property.

A bomb can be enclosed in either a parcel or an envelope, and its outward appearance is limited only by the imagination of the sender. However, mail bombs have unique characteristics that may assist in identifying suspect packages.



Security Incidents, continued

Appearance of Suspicious Packages



- Mail bombs may display restricted endorsements such as "Personal" or "Private". This factor is important when the addressee does not usually receive personal mail.
- Addressee's name / title may be inaccurate.
- Return address may be fictitious.
- Mail bombs may reflect / distort handwriting or the name and address may be prepared with homemade labels or cut-and-paste lettering.
- Cancellation or postmark may show a different location than the return address.
- Mail bombs may have excessive postage.
- Mail bombs may feel rigid or appear uneven or lopsided and may have an irregular shape, soft spots or bulges.
- Parcel bombs may be unprofessionally wrapped with several combinations of tape used to secure the package and may be endorsed "Fragile Handle With Care" or "Rush Do Not Delay".
- Parcel bombs may have a buzzing or ticking noise or a sloshing sound.
- Pressure or resistance may be noted when removing contents from an envelope or parcel.



Security Incidents, continued

Dealing with Suspicious Packages

If an employee is suspicious of a mailing and is unable to verify the contents with the addressee or sender:

- Do not open the article.
- Isolate the item and evacuate the immediate area.
- Do not put the package or envelope in water or a confined space such as a desk drawer or filing cabinet.
- If possible, open windows in the immediate area to assist in venting potential explosive gases.

If an employee suspects a harmful chemical or biological substance is in a package already on company property they should:

- Cover the package or envelope with a plastic sheet, raincoat, etc.
- Evacuate the room closing all doors and windows.
- Call their supervisor who will contact the local police.
- Isolate the area where the package is.
- Isolate themselves in another area that has a telephone and wait for the emergency responders to arrive.

If an employee has touched a package that possibly contains a harmful substance or got some on their clothes, they should:

- Wash their hands well.
- Shower with their clothes on
- Undress and seal their clothes in a plastic bag.
- Shower again and put on fresh clothes.

If an employee has any reason to believe a letter or parcel is suspicious, they should never take a chance or worry about possible embarrassment if the item turns out to be innocent.

Trespassing

Any person who enters land where entry is prohibited or does not leave land immediately after being directed to do so by the owner or occupier of the land is guilty of trespassing.

Dealing with Trespassing

If any personnel encounter a trespasser:

- Ask the trespasser to leave the unauthorized area.
- Give the trespasser a reasonable amount of time to leave peacefully.
- If the trespasser refuses to leave, call the RCMP / local authority.



Security Incidents, continued

Vandalism

Vandalism is the willful damaging or defacing of property belonging to another person or to the public. Acts of vandalism can include:

- Defacing removing, marking or damaging a part of an object to draw attention to it.
- Criminal damage willful and unlawful destruction of other people's property.
- "Tagging" or graffiti gangs use "tags" to mark their territory and usually spray-paint walls and doors of homes and business establishments.

Vandalism can happen at any time of the day or night and in any season, but it most often occurs:

- In the evening during summer and fall
- On weekday evenings
- At night when fewer people are around and the property isn't under as much scrutiny
- Where building design and lighting offers concealment and anonymity
- In areas frequented by young people such as schools, parks, shopping plazas and public buildings
- In unoccupied buildings, open spaces or parked vehicles where minimum surveillance is given to property

Dealing with Vandalism

- Report all incidents of vandalism to a supervisor
- Do not paint over vandalism and graffiti until the police department gives clearance to do so.

Terrorism

Terrorism is the use of violence and threats against persons or property for the purposes of intimidation, coercion or ransom. The direct targets of violence are not the main targets of a terrorist but a means to draw the attention of the local populace, the government and the world to their cause. A terrorist group commits acts of violence to:

- Produce widespread fear
- Obtain worldwide, national, or local recognition for their cause by attracting the attention of the media
- Destroy facilities or disrupt lines of communication in order to create doubt that the government can provide for and protect its citizens
- Discourage foreign investments, tourism or assistance programs that can affect the target country's economy and support of the government in power
- Influence government decisions, legislation or other critical decisions
- Satisfy vengeance

Acts of terrorism include threats of terrorism, assassinations, kidnappings, hijackings, bomb scares and bombings, cyber-attacks, and the use of chemical, biological, nuclear and radiological weapons.



Security Incidents, continued

Examples of Petroleum Assets Subject to Risk

- Buildings: Administration offices, corporate offices, control rooms
- Equipment: Process units and associated control systems, product storage tanks, surge vessels, boilers, turbines, process heaters, sewer systems
- Support Systems: Utilities such as natural gas lines, electrical power grid and facilities (including back-up power systems), water-supply systems, wastewater treatment facilities
- Transportation Interfaces: Railroad lines and railcars, product loading racks and vehicles, pipelines entering and leaving facility, marine vessels and dock area, off-site storage areas
- Cyber systems and information technology: Computer systems, networks, all devices with remote maintenance ports, SCADA systems, laptops, PDAs and cell phones.

Dealing with Terrorism

All threats and incidents should be reported to the RCMP Terrorism Tip Line at 1-800-420-5805.

In order to deal with threats of terrorism, it is important to establish a security management system to effectively manage security risks. This system should include a security risk management process incorporating asset characterization, threat assessment, vulnerability assessment, risk assessment, risk mitigation, communication and recommendations.

This system should be reviewed at regular intervals and updated as necessary.

Cyber-Attacks

Cyber-attacks are computer-to-computer attacks that undermine confidentiality, integrity or availability of a computer or the information contained.

Cyber-attacks can make computer systems malfunction or result in a disrupted flow of data and have the potential to create extreme economic damage.

This threat includes a risk to SCADA and DCS systems, which collect, display and store information in support of controlling equipment, devices and facilities.

Preventing Cyber-Attacks

Steps that can be taken to enhance your cyber security:

- Know who owns and operates the IT system and its operating framework.
- Map the network include all internal/external connections, configuration control, etc.
- Develop a security policy structure and implement compliance monitoring.
- Apply as much security and hardening as appropriate.
- Accredit the IT system and follow a risk management approach.
- Know the system's possible vulnerabilities.
- Patch the system in a timely manner the longer this is delayed, the longer the system is vulnerable.
- Reduce Internet access points.
- Reduce or eliminate potential sources of infection USB flash drives (thumb drives, USB keys, etc.), flash media, etc.



Security Incidents, continued

• Communicate, train and educate staff and users.

Source: 10 IT Security "Commandments" - Communications Security Establishment Canada

Dealing with Cyber-Attacks

In the event of a cyber-incident:

• After obtaining corporate approval, local police or RCMP should be notified.

Serious cyber incidents:

• Should be reported to Public Safety Canada by email at contact@cyber.gc.ca or by phone at 1-833-292-3788.



Animal Encounters

First Responders to Animal Attacks

In the event of witnessing or identifying a scene as an attack, it is important to avoid harm to yourself. If equipped with deterrents, an attempt to scare away any remaining animals on scene is optional. In most cases any animals who have recently engaged in an attack are unpredictable therefore it is advised to keep clear and wait until the scene is clear. Steps to be considered:

- Assess the immediate area for personal safety and determine the type of incident
- If cause of injury is unknown, use your gas monitor to ensure there aren't any air-borne hazards.
- Ensure all animals have vacated the scene.
- If not, use any available noise deterrents (Honk Horn, Rev Engine, yell etc.)
- If possible call or radio for assistance and emergency services.
- Calling an applicable wildlife agency is an effective alternative; however, if confronted with a fast paced scenario such as this, the RCMP will be able to direct your call appropriately.
- Once the area is safe, assess the individuals' injuries and administer any necessary first aid. If the victim is conscious, always ask for his/her consent before doing so.
- Stay with the victim until help arrives:
 - As shock to the victim may be a factor after an attack, using a calm voice and catering to the individuals' requests as best possible is beneficial. For example; covering the victim with a blanket, providing drinking water for the victim, ensuring the victim that help is on the way, etc.
 - Minimize the victim's movements until emergency services have arrived as the extent of harm to the individual is unknown until assessed by a licensed health care representative.
- It is important to document the time and actions taken if a scenario like this presents itself as it will aid
 you and your company in showing what actions have been taken and how the situation has been
 responded to.
- Notify your supervisor of the incident.
- You or your supervisor must contact the applicable wildlife regulatory agency to report the incident.



Animal Encounters, continued

Bears

There are no hard and fast rules about what to do when you confront a bear. Bears react to humans in different ways in different situations. A bear's reaction depends on the following: sex, age, health; the season; whether the bear is hungry; whether bear cubs are present or whether there is an escape route available to the bear. Never harass or chase a bear!

There are three possible scenarios that are most likely to occur:

- 1. A wandering bear. While it is unlikely that a bear will wander into an area and near workers, we must be prepared to deal with this situation. Any bear seen on the job site will cause an immediate notification of the Incident Commander. In addition, all workers within 500 metres of the animal are to seek immediate shelter within a vehicle or building. The Incident Commander shall assess the situation, observe the bear for its intent, and determine a proper course of action to be taken. At no time will the bear be approached by any workers for any reason other than at the direction of the Incident Commander.
- 2. A located occupied den. A den occupied by a bear will cause an immediate cessation of work and removal of personnel within 500 metres of the den and notification of the Incident Commander. At the discretion of the Incident Commander, the appropriate Environment Fish and Wildlife agency may be notified to determine the best course of action to be taken.
- 3. Denning bear disturbed. The company understands that disturbing a hibernating bear is unsuitable for both the bear and for the workers. Upon discovery or disturbance of a hibernating bear all workers will immediately retreat from the area to a distance of not less than 500 metres and into immediate shelter within a vehicle or building. This situation will cause an immediate notification of the Incident Commander.

On the Trail

Bear encounters on the trail can be dangerous, especially if the bear is surprised or if it is a female with cubs. The bear may consider you a threat and either run away or attempt to remove you as a threat. If you encounter a bear on a trail:

- Stop! Try to stay calm and quiet. Do not make any sudden moves or loud noises. Avoid direct eye contact with the bear; however, never take your eyes off the bear.
- Size up the situation. Is it a black bear or a grizzly? Are there cubs present and where are they in
 relation to you and the bear? Did you disturb the bear during feeding? Where is the rest of your
 party? (Always stay together as a group; a bear is less likely to attack a group of people than an
 individual).
- Do not run from the bear. You cannot out run it! Black bears can reach speeds of 55km/hr.
- Talk quietly and slowly back up leaving the way you came; give the bear enough time and room to leave on its own. Invading the bears space will invoke its "fight or flight" response. Grizzly bears are most likely to fight while Black bears are most likely to choose flight. Avoid any rapid movements and move up wind so the bear can catch your scent and determine you are not a threat.
- If the bear keeps coming at you, climb the tree as high as you can. Remember, some grizzlies and all black bears can climb trees; but if you climb a tree the bear may feel less threatened.



Animal Encounters, continued

In Case of Attack (general)

Try to defend yourself on a steep slope or grade; in doing so, you can ensure that any bear will at least have a difficult time standing erect, thereby reducing his full weight force. Bears are also front-heavy, creating an offset in balance when downing slopes or grades.

- Do not run from the bear. You cannot out run it. A bear will often make a "bluff" charge, in which it turns away at the last moment. Running away from such a charge will trigger a more aggressive attack.
- If the bear continues the attack, spray bear ("pepper") aerosol in the animal's eyes. This may cause the bear to stop the attack, and give you an opportunity to escape.

Note: Bear spray must be kept on your person within easy reach or it will not be of use. Bear spray is not a repellent, but a weapon that is only effective in the animal's eyes and nose. It will not repel bears from a sprayed area. In fact, there is evidence to suggest that bears are attracted to objects covered with pepper spray. Read the instructions, understand how to use the spray, and test it to be sure of its range and accuracy.

- If no escape is possible and the bear has knocked you to the ground—roll yourself into a "cannonball" position and play dead. Cover your neck and head with your hands and arms. Stay in this tucked position until the bear leaves.
- If a black bear is attacking you, or you are attacked at night by either species, consider it a predatory attack and fight back with everything you have.

Defensive Attack

- Bears will engage in a defensive attack when feeling threatened or cornered. This type of attack
 occurs when a bear is protecting her young, or the carcass of its latest kill. The bear will show signs
 of stress, like huffing, pawing the ground, exposing its teeth, body swaying and pinning its ears back.
 The bear in this type of attack will often make "bluff" charge, in which it will turn away at the last
 moment or veer off its path.
- In this type of attack, play dead to show the bear you are not a threat.
 - o If wearing a pack, leave it on for protection
 - o Lie face down on the ground, legs splayed (spread) so the bear cannot easily turn you over
 - If rolled over, quickly turn back onto stomach
 - Clasp hands around the back of your neck
 - o Do not shout or act aggressive
 - Remain quiet and still
 - Be prepared to wait until the bear realizes you are not a threat.
- If the bear continues to attack, fight for your life, aiming your assault at the bears head, nose and eyes.

Predatory attack

- Bears will show no signs of stress during this type of attack. The bear will stalk you and swiftly attack without a warning or "bluff" charge.
- In this type of attack, act aggressive to show the bear you will not be easy prey
 - o Do not be submissive
 - o Face the bear, never taking your eyes off of it



Animal Encounters, continued

- Don't attempt to run away
- Scan for any near-by cover and possible weapons (stick and stones)
- Prepare your deterrent
- Make yourself as large as possible
- o Raise your arms and stomp your feet
- Use rapid arm and leg movement
- Shout loudly
- Remove your pack
- o DO NOT PLAY DEAD
- If the bear continues to attack, fight for your life, aiming your assault at the bears head, nose and eyes.

In Camp

Bears entering a camp may be coming to feed on human food and garbage, based on their past experiences in camps. Such bears are especially dangerous because they have become human habituated and no longer fear people. It is important if a bear wanders into your campsite to provide it with a negative stimulus to prevent it from returning and becoming human habituated (screaming, noise deterrents etc.). If your campsite is clean, with all attractants properly stored, a bear may lose interest and move on. If a bear comes into your camp, refer to the points in ON THE TRAIL. If your vehicle is nearby, get in it as soon as possible.

Cougars

Conflict between cougars and humans is extremely rare. Although a cougar attack is highly unlikely, it always pays to be prepared. Information and awareness are your best defenses.

- Cougars are most active at dusk and dawn. However, they will roam and hunt at any time of the day
 or night and in all seasons.
- During late spring and summer, one to two-year old cougars become independent of their mothers. While attempting to find a home range, these young cougars may roam widely in search of unoccupied territory. This is when cougars are most likely to conflict with humans.
- Cougars have four toes with three distinct lobes present at the base of the pad. Claws are retractable, so they usually do not leave imprints.
- Generally, cougars are solitary. If tracks show two or more cougars traveling together, it probably indicates a female with cubs.
- Cougars seem to be attracted to children, possibly because their high-pitched voices, small size, and
 erratic movements make it difficult for cougars to identify them as human and not as prey.

Cougar Safety

- Avoidance is the best line of defense.
- Keep a radio playing.
- Do not attract or feed wildlife, especially deer or raccoons. These are natural prey and may attract cougars.
- · Roaming pets are easy prey.



Animal Encounters, continued

- Bring pets in at night. If they must be left out, confine them in a kennel with a secure top.
- Do not feed pets outside. This not only attracts young cougars but also many small animals, such as mice and raccoons, that cougars prey upon.
- Place domestic livestock in an enclosed shed or barn at night.
- Hike in groups of two or more. Make enough noise to prevent surprising a cougar.
- Carry a sturdy walking stick to be used as a weapon.
- Watch for cougar tracks and signs. Cougars cover unconsumed portions of their kills with soil and leaf litter. Avoid these food caches.
- Cougar cubs are usually well hidden. However, if you do stumble upon cougar cubs, do not approach
 or attempt to pick them up. Leave the area immediately, as a female will defend her young.

If You Meet a Cougar

- All cougar encounters should be considered predatory. Act big and confident. Make direct eye contact, be loud and attempt to intimidate.
- Never approach a cougar. Although cougars will normally avoid a confrontation, all cougars are unpredictable. Cougars feeding on a kill may be dangerous.
- Always give a cougar an avenue of escape.
- Stay calm. Talk to the cougar in a confident voice.
- Pick all children up off the ground immediately. Children frighten easily and their rapid movements may provoke an attack.
- Do not run. Try to back away from the cougar slowly. Sudden movement or flight may trigger an
 instinctive attack.
- Do not turn your back on the cougar. Face the cougar and remain upright.
- Do all you can to make yourself seem larger and as intimidating as possible. Don't crouch down or try
 to hide. Pickup sticks or branches and wave them about.
- Any cougar seen on the job-site will cause an immediate notification of the Incident Commander. In
 addition, all workers within 500 metres of the animal are to seek immediate shelter within a vehicle or
 building. The Incident Commander shall assess the situation, observe the cougar for its intent, and
 determine a proper course of action to be taken. At no time will the cougar be approached by any
 workers for any reason other than at the direction of the Incident Commander.

If a Cougar Behaves Aggressively

- Arm yourself with a large stick, throw rocks, and speak loudly and firmly. Convince the cougar that you are a threat, not prey.
- If a cougar attacks, fight back! Many people have survived cougar attacks by fighting back with anything, including rocks, sticks, bare fists, and fishing poles.

Cougars are a vital part of our diverse wildlife. Seeing a cougar should be an exciting and rewarding experience, with both you and the cougar coming away unharmed. At the discretion of the On-Site Group Supervisor, the appropriate Environment Fish and Wildlife agency may be notified to determine the best course of action to be taken.



Animal Encounters, continuedLarge Hooved Animals (Ungulates)

This family is comprised of several hooved omnivores common to Canadian lands. Unknown to most, ungulates cause more yearly fatalities then all predatory species combined. However, this is mainly due to vehicular accidents as opposed to acts of aggression. This class refers to:

- Bison
- Moose
- Mule and White tailed deer
- Flk
- Caribou

Ungulate Safety

- Generally speaking they prefer not being near people.
- The best line of defense is avoidance.
- Although physical size and appearance varies significantly, temperaments have been noted to be fairly similar between most species of ungulate.
- Mating season for most ungulates is during the fall months with the young being born in the spring; at both of these periods females and particularly males will become more aggressive and territorial.
- Like all wildlife, keeping a safe distance and never feeding the animals is advised.

If You Meet an Ungulate

The following 7 steps are suggested if experiencing a close encounter:

- 1. Avoid making similar noises, such as coughing, groaning, grunts, etc.
- 2. Do not approach the animal.
- 3. Stay calm and increase the distance between you and the animal while looking for an escape.
- 4. Run to safety once close enough.
- 5. Use noise deterrent if available.
- 6. Climb a tree if possible.
- 7. Report the incident to a work authority.

If It Behaves Aggressively

If confronted by an ungulate that feels threatened by you, consider it to be a dangerous situation.

Look for an avenue of escape.

If knocked down:

- Curl up in a ball, protect head and neck with arms, and remain as still as possible. This is known as the "cannonball" position.
- Do not try to escape until the animal has moved a safe distance away.



Animal Encounters, continued

Rattle Snakes

Most North American snakes aren't poisonous. Exceptions in Canada include the rattlesnake and very rarely the copperhead snake. Their bites can be life-threatening. Both have slit-like eyes and are known as pit vipers. Their heads are triangular, with a depression (pit) midway between the eye and nostril on either side of the head. Rattlesnakes can be easily identified by the "rattle" noise created from the last segment of their tale when shaken.

Rattlesnake Safety

- Wear over-the-ankle or calf high boots.
- Do not put your hands where you cannot see.
- Use a tool when turning over rocks or boards.
- Always step on rocks and logs, never walk over them.
- Avoid walking through dense brush. If you must use a long stick or branch to beat the brush.
- Be careful when stepping over doorsteps. Snakes like to crawl along the edge of buildings.

If You Meet a Rattlesnake

- Remain calm. Do not panic.
- Stay at least five feet from the snake. Give the rattlesnake respect and space. Give the snake plenty
 of room.
- Avoid touching any snake. Back away slowly. Most snakes avoid people if possible and bite only when threatened or surprised.
- Do not try to kill the snake. Doing so is illegal and greatly increases the chance the snake will bite
 you.
- Alert your supervisor and others in the area of its location and update any hazard maps. Advise them to use caution and to respect the snake. Keep children and pets away.

In the event of a snake bite

- Remain calm, and inactive. By becoming agitated, your heart beats faster and you increase the flow of blood to the affected area and increase the amount of toxin able to find its way into your tissues.
- Immobilize the bitten arm or leg, and stay as quiet as possible to keep the poison from spreading through your body.
- Remove jewellery before you start to swell.
- Position yourself, if possible, so that the bite is at or below the level of your heart.
- Cleanse the wound, but don't flush it with water, and cover it with a clean, dry dressing.
- Do not put ice or cold substances on the bite.
- Apply a splint to reduce movement of the affected area, but keep it loose enough so as not to restrict blood flow.
- Mark the size of the affected area with a pen to track its progression.
- Drink plenty of fluids to maintain blood volume and prevent shock
- Don't try to capture the snake, but try to remember its colour and shape so you can describe it, which
 may help identify the snake for treatment, or try to get a picture of it from a safe distance.



Animal Encounters, continued

- Drive to a hospital or doctor's office ASAP, or have someone else drive. In the event you are several hours away from the nearest hospital, stay standing, stay hydrated, stay calm, and use a cell phone to call emergency responders.
- Do not make "X" incisions over the fang injuries or suck out the toxin. You will most likely cause excessive bleeding and/or additional necrosis (tissue death) and/or further infection from the germs in your mouth or surrounding environment.
- For shallow bite wounds, let it bleed out naturally. More blood will come out at first as generally there are anticoagulants in the venom. If a bite is deep enough to cause spurting blood (i.e. the strike hit a major artery and you're losing blood fast), immediately apply pressure to the wound and call emergency medical personnel.
- Do not use a tourniquet. While certain medical conditions still are helped with proper application of a tourniquet, these are few in number. In most cases, application of a tourniquet will cause necrosis and possibly elevate the need for amputation of the affected area distal to the heart. (a tourniquet is a tight encircling band applied around an arm or leg in an emergency to stop severe bleeding, e.g. tying a piece of cloth around your arm really tight) However, if treatment is more than 60 minutes away, using a constrictive band is advisable to prevent spread of the toxin. The band should be placed 5-10 cm above the bite and you should be able to place 2 fingers under the band.
- Snakes typically do not exhaust their venom after the initial bite, so be sure to remove yourself from the area as quick as possible. Furthermore, snakes have been known to have a bite reflex last up to 60 minutes after death.
- Watch the victim for signs of shock. This is treated by lying flat with feet elevated. Cover with warm clothes or blankets.

Wolves

Wolves generally avoid human interactions, unless they have become human habituated through repeated exposure to humans without any negative stimulus. It is not normal for wolves to attack or pursue humans. Please do your part to keep wolves where they belong, in the wild. As human population continues to grow, wolves are now considered an endangered species in Canada. In an attempt to keep wolves non-habituated, if seen, ensure all garbage has been properly disposed of and use noise to deter/scare the animal(s) away.

Wolf safety

- Wolves are notoriously intelligent animals; generally hunting in groups or packs surrounding their prey.
- Wolves have ranges of up to 400km.
- Wolves may breed anytime throughout the year. However, pups are mainly born between April-June at which time the entire pack will aggressively defend their young.
- Wolves are considered timid towards humans. Attacks are more likely if a wolf feels threatened, is sick, or assess their prey maybe injured and therefore more susceptible to attack.
- Secure all food items and never feed any other wildlife. Deer and small mammals can attract larger predators such as wolves.
- Howling is a form of communication for wolves. If heard within a close proximity, it is advised to find shelter in a vehicle or building.



Animal Encounters, continued

If you meet a wolf

In the unlikely event of a wolf or wolves threatening humans, here is what to do.

- Stay calm
- Never make sudden movement; back away slowly, never turning your back on the wolf.
- Leave the wolf an avenue of escape.
- Raise your voice and speak firmly.
- If the wolf continues to approach, wave your arms in an attempt to make yourself look bigger.
- Make use of any rocks, sticks, camping gear, fists, or feet to fend off an attack, Try to protect your neck and head from attacks.

Finding a wolf carcass

Wolves are an endangered species; in the event of finding a wolf carcass, take these following steps:

- Do not disturb or move any evidence.
- If possible, cover the carcass with a secured tarp or blanket in an attempt to preserve it.
- Once reported to your supervisor, call the appropriate provincial wildlife agency as they will determine
 the best course of action to be taken.

Bees and Wasps

The presence of native wild bees, and many species of wasps and hornets will be noted by all personnel working on the project.

Head-nets will be required PPE for all personnel when working in areas where large concentrations of bees, wasps, or hornets have been identified.

All personnel will inform the Incident Commander of any known allergy to, or past reaction to bee, wasp, or hornet stings.

If a "nest" is detected:

- All personnel will leave the area immediately.
- Call in the location of the "nest" to the Incident Commander.
- The area will be flagged as a hazard and its location written down for marking on the hazard map.

If a sting or attack occurs the following procedure will be followed:

- Remove the stinger within 30 seconds if possible.
- Do not squeeze the wound as this will release more venom.
- Wash the wound with soap and water.
- Apply cold pack.
- Watch for any of these signs and symptoms of allergic reaction and notify Incident Commander immediately if detected: rash, tightness of the chest and throat, swelling of the face, neck, and tongue, excessive sweating, dizziness, and / or difficulty breathing.



Animal Encounters, continued

EpiPens

Adrenaline (epinephrine) is a natural hormone released in response to stress. It is a natural "antidote" to the chemicals released during severe allergic reactions triggered by drug allergy, food allergy or insect allergy. It is destroyed by enzymes in the stomach, and so needs to be injected. When injected, it rapidly reverses the effects of a severe allergic reaction by reducing throat swelling, opening the airways, and maintaining blood pressure.

Use of adrenaline for treating anaphylaxis is First Aid.

IMPORTANT: The information provided is of a general nature and should not be used as a substitute for professional advice. If you think you may suffer from an allergic or other disease that requires attention, you should discuss it with your Incident Commander.

Warning / direction for EpiPen use:

- Never put thumb, fingers, or hand over the orange tip. (Tip colours vary by brand. Other colours are generally black and green.)
- Do not remove grey safety release until ready to use.
- Do not use if solution is discoloured or red flag appears in clear window as it may be expired.
- Do not place any other foreign objects in carrier with auto-injector, as this may prevent you from removing the auto-injector for use.

Steps for EpiPen use:

- 1. Unscrew the yellow or green cap off of the EpiPen carrying case and remove the EpiPen auto-injector from its storage tube.
- 2. Grasp unit with the black tip pointing downward.
- 3. Form fist around the unit (black tip down).
- 4. With your other hand, pull off the gray safety release.
- 5. Hold black tip near outer thigh.
- 6. Swing and jab firmly into outer thigh until it clicks so that unit is perpendicular (at a 90° angle) to the thigh. (Auto-injector is designed to work through clothing.)
- 7. Hold firmly against thigh for approximately 10 seconds. (The injection is now complete. Window on auto-injector will show red.)
- 8. Remove unit from thigh and massage injection area for 10 seconds.
- 9. Call for Help and seek immediate medical attention.
- 10. Carefully place the used auto-injector (without bending the needle), needle-end first, into the storage tube of the carrying case that provides built-in needle protection after use. Then screw the cap of the storage tube back on completely, and take it with you to the hospital emergency room.

Most of the liquid (about 90%) stays in the auto-injector and cannot be reused. However, you will have received the correct dose of the medication if the red flag appears in window.

Immediately after EpiPen use:

- Go immediately to the nearest hospital emergency room or call 911. You may need further medical attention. Take your used auto-injector with you.
- Tell the doctor that you have received an injection of epinephrine in your thigh.
- Give your used EpiPen to the doctor for inspection and proper disposal.

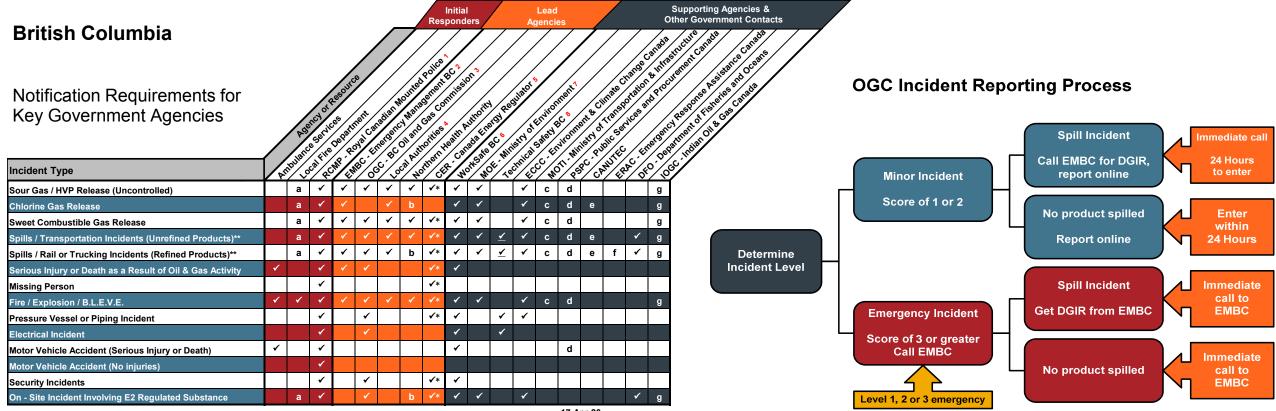


Section 5: External Agencies

Provincial Notification Matrix
Provincial Lead Agency Roles
Government Consultation Summary
Specific Government Agency Roles
Health Services
Local Authority
Provincial Supporting Agency Roles
Federal Agency Roles



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Phone numbers for the agencies listed above are located in the Area Specific Information

- Compulsory contact
- * CER is a compulsory contact only for emergencies involving CER regulated sites and inter-provincial pipelines.
- ** Refer to the British Columbia Petroleum Release Reporting Requirements chart included in the ERP.
- _ Technical Safety BC only requires reporting of rail related accidents, incidents and spills. No other transportation related emergencies need to be reported.

EMBC to notify the OGC for all incident types including fire/explosion incidents, pressure vessel incidents, spills and releases, or electrical incidents occurring at facilities approved by the OGC.

EMBC to notify the Ministry of Environment for any incident which affects the water, air, or land environment, or any white or green space in the province.

EMBC to notify Environment & Climate Change Canada (ECCC) of all oil and gas incidents in time, but immediately as required for incidents involving regulated substances at E2 registered facilities, incidents involving PCBs or any spills on First Nations lands, in National Parks, into river or lake systems containing fish, or onto railway right-of-way.

EMBC to notify Ministry of Forests, Lands and Natural Resources Operations, Northern Health Authority, affected municipalities and all other level of government and industry; depending on the ECC code level in their SOPs.

- a) Contact the local fire department if there is potential for secondary fires resulting from the ignition of spilled liquids or escaping gases.
- b) Contact the Northern Health Authority if the incident affects public health, e.g., contaminated drinking water.
- c) Contact the Ministry of Transportation and Infrastructure (MOTI) and the RCMP if the emergency intersects with a 1, 2 or 3 digit Provincial or Secondary highway (e.g., Hwy 2, Hwy 47, Hwy 837). MOTI and RCMP have the authority to shut down highways.
- d) Contact Public Services and Procurement Canada (PSPC) and the RCMP if the emergency intersects with the Alaska Highway (97) north of mile 83.5 all the way to the Yukon border. PSPC and RCMP have the authority to shut down this portion of the Alaska highway.
- e) Contact the Canadian Transport Emergency Centre (CANUTEC) when a highway is shut down, there is an injury or fatality, there is lost, stolen or unlawfully interfered with dangerous goods (except Class 9), the incident involves infectious substances, there is an accidental release

 from a cylinder that has suffered a catastrophic failure, where the shipping documents display CANUTEC's telephone number, where a railway vehicle, ship, aircraft aerodrome or an air cargo facility is involved, when a facility is closed, evacuation/shelter-in-place procedures take

 place as a result of the transportation of dangerous goods, containment has been damaged and integrity compromised, or the centre/stub sill of a tank car is broken or there is a crack in the metal ≥ 15cm(6"). CANUTEC can also provide guidance on handling procedures for toxic material releases
- f) Emergency Response Assistance Canada will only respond to transportation incidents and only incidents that involve the following UN numbers: 1075 (Propane, Butane, etc.) and 1010 (Butadiene); and those products have tank storage capacity of 450 litres or greater.
- g) Indian Oil & Gas (IOGC), the First Nation and the provincial authority must be notified immediately in the event of any health or environment-threatening emergency or off-lease spills on First Nation reserve lands. On-lease spills greater than 1m3 must be reported to IOGC immediately
- 1 In the event of a fatality, request that the RCMP contact the Medical Examiner. The RCMP must be notified in the case of lost, stolen or misplaced explosives, radioactive materials or infections substances.
- 2 Notify Emergency Management BC (EMBC) for all spill and non-spill incidents to receive a Dangerous Goods Incident Report (DGIR) number. EMBC will notify the OGC and Ministry of Environment, and will provide a representative to coordinate the provincial response.
- 3 Contact the OGC for any spills or release of hazardous substances that are not provincially regulated (such as radioactive materials), pipeline incidents such as spills during construction phase, exposed pipe caused by flooding, pipeline over pressure, failure (without release) of any pressure control or ESD device during operations, drilling kicks when any of the following occur: pit gain of 3m³ or greater, casing pressure 85% of MA, 50% out of hole when kicked, well taking fluid (LC), associated spill or general situation deterioration such as leaks, equipment failure or unable to circulate etc., major damage to oil and gas roads or road structures and security related issues which are relatively minor; such information may be required for tracking and monitoring purposes only. The OGC must also be notified of needed emergency oil and gas road closures. The OGC may request a NOTAM order from NAV Canada upon request from operator.
- 4 Local authorities include regional district disaster services, national park authorities and the local police.
- 5 Contact the Canada Energy Regulator (via the Transportation Safety Board of Canada) for all emergencies involving CER regulated sites and inter-provincial pipelines. The CER regulates all inter-provincial pipelines and other facilities and sites located in Frontier lands (Northern Canada).
- Ensure any workplace conditions that present an immediate hazard to other workers are addressed, ensure first aid and medical treatment for the worker, and then notify WorkSafeBC of the incident. The requirement to immediately report a serious injury or fatality is separate from the requirement to report injuries for claims purposes. Failure to immediately notify WorkSafeBC will be considered a breach of section 172 of the Workers Compensation Act. The employer must immediately report the following incidents, injury or not: Any incident that kills, causes risk of death, or seriously diving incident or decompression sickness, a major leak or release of a dangerous substance, a major structural failure or collapse of a structure, equipment, construction support system or excavation, or any serious mishap. Must also report incidents that requires the employee to seek medical attention or cause time-loss from work.
- 7 Ministry of Environment was formerly known as Ministry of Water, Land and Air Protection
- Technical Safety BC is to be notified immediately in cases of Boilers, Pressure Vessels, Piping and Fittings, Electrical & Gas incidents resulting in a moderate, major or severe property damage. All other incidents must be reported within 24 hours (or as soon as practical). Rail accidents where a person sustains a serious injury or is killed as a result of being on board or getting on or off the rolling stock, or coming into contact with any part of the rolling stock or its contents, or the rolling stock is involved in a grade crossing collision or a derailment, sustains damage that affects its safe operations, or causes or sustains a fire or explosion, or causes damage to the railway, that poses a threat to the safety of any person, property or the environment, or any dangerous good is released.





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☐ Complete a "lessons learned" process based on the scope of involvement and provide

Before the Incident

The Emergency Response and Safety Department is the lead department responsible for emergency management within the Commission. The Department oversees the administration of the FMR This includes:

- ☐ Reviewing industry emergency management programs and plans
- ☐ Participating in permit holder emergency response exercises
- ☐ Providing 24 hour Emergency Officer services
- ☐ Leading emergency and incident follow-up and investigation
- Administering incident and complaint response services
- ☐ The Commission uses a combination of reviews, assessments, and field inspections.
- ☐ To ensure permit holders maintain compliance with the requirements detailed in the Emergency Management Regulation and the Oil and Gas Activities Act. The audit and inspection program objectives are to ensure permit holders have adequate processes and procedures in place.
- Participate in selected licensee ERP exercises.
- ☐ Maintain a 24 hour telephone contact where petroleum industry incidents can be reported.
- ☐ Assist the OGC with planning initiatives regarding petroleum industry emergency response as requested by the OGC.
- ☐ EMBC Northeast Region receives Industry Facility Emergency Response Plans.
- ☐ Participate in selected licensee ERP exercises when requested as time permits.
- ☐ Maintain a 24 "800" telephone contact where petroleum industry spill incidents can be reported
- ☐ Maintain 24 hour emergency contact numbers for local governments and provincial emergency responders.
- ☐ Set up and maintain an emergency management organization which can include an executive committee, emergency program management committee, emergency program coordinator or emergency social services director.
- Develop and maintain a Hazard, Risk and Vulnerability Analysis (HRVA) to identify potential emergencies and disasters in its jurisdictional area.
- ☐ Educate community residents and business owners about the need for personal emergency preparedness
- ☐ Prepare for emergencies and disasters through mitigation, preparedness, response and recovery planning.
- Conduct training and exercises for all emergency response staff.
- ☐ Establish procedures for implementing, reviewing and revising response and recovery
- □ Complete periodic reviews and updating of the local emergency plan.
 □ Respond to emergencies when required.

accessed through 9 1 1 and have internal dispatch arrangements.

emergency care and transport of patients across the province.

☐ Participate in industrial operators' exercises where possible

☐ Maintain 24 hour emergency contact numbers.

Respond to emergencies when required.

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- ☐ Establish procedures for notifying persons threatened by emergencies or impending disasters
- ☐ Identify procedures for obtaining emergency resources.
- ☐ Establish priorities for restoring essential services.
- ☐ Work with volunteer groups to plan for the provision of food, clothing and shelter to

The first level of emergency response is provided by fire and/or police services and may

involve the activation of the Emergency Operations Centre (EOC). Other first responders,

such as the RCMP and British Columbia Ambulance Service, have a provincial mandate

but with a local presence through detachments or stations. These agencies are usually

☐ First responders work at the site level of an event and include police, fire and

☐ When a local authority EOC is activated, police and fire first responder agencies provide

situational awareness to the local authority and submit requests for support to the local ☐ First response services provided by a fire department are determined by the local

authority responsible, and may include hazardous material incident response, road

☐ The BC Ambulance Service (BCAS) operates under the authority of the Emergency and

Health Services Commission (EHSC) and is tasked with the provision of pre-hospital

☐ BCAS staff actively participates in emergency planning, mock emergency exercises and other joint training initiatives to ensure emergency preparedness and response

resources are identified and deployed quickly and effectively when they are needed

ambulance. Activities of first responders include medical response, firefighting and

- Participate in industrial operators' preparatory training and exercises where possible.
- Maintain 24 hour emergency contact numbers.

managing crowds or evacuation zones.

rescue, and medical rescue.

☐ Provide representatives to help coordinate provincial response as required

Procedures (SOPs) in ECC will determine who is notified.

- ☐ Provides the local government response for rural and crown areas.
- ☐ Assesses the situation
- Provides support to the first responders, including resources.
- ☐ Provides public information, including media briefings.
- ☐ Coordinates the provision of food, clothing, shelter and transportation.

structure to provide situation updates related to threatened oil and gas assets.

☐ Notified by EMBC of incidents within OGC's jurisdiction (on lease).

☐ Request NOTAM order from NAV Canada upon request from operator.

May send an OGC representative to operator's On-Site Command Post and / or Evacuation Centre.

Oversee operator's response to an incident

☐ Issue road closure order upon request from operator

☐ May establish a government EOC at the OGC office.

☐ Confirm ignition decision with operator if time permits.

☐ Confirm media releases to be sent out by operator.

☐ Establish communication with operator.

☐ Confirm incident level with operator.

☐ Confirm downgrade of incident level.

- ☐ Liaises with volunteer groups.
- ☐ Provides situation reports to the PREOC.
- □ Tracks finances.
- ☐ Coordinates recovery of essential services.
- ☐ Coordinates community recovery efforts
- ☐ During emergencies and disasters the local authority's primary link to the provincial emergency management structure is the PREOC.
- ☐ When a local authority EOC is activated, police and fire first responder agencies provide situational awareness to the local authority and submit requests for support to the local authority EOC.

During the Incident

During emergencies the Oil and Gas Commission (OGC) acts as a liaison between industry operators and the provincial emergency management

□ ECC Victoria will notify the OGC on call Emergency Response Officer and initiate British Columbia's notification of government agencies including MOF, MOE, MOT, Health Unit, WorkSafe BC, affected municipalities and all other level of government and industry, depending on the

level of "coding" (notification code 1,2,3 is determined by the Lead Agency MOE or OGC), depending on the code level Standard Operating

- ☐ Establish contact with the industrial operator in order to:
 - Obtain additional hazard information.
 - ☐ Determine where roadblocks should be or are established.
 - ☐ Determine the direction of approach to the incident.
 - ☐ Determine if there are any injuries.
 - $\hfill\square$ Find out what response and public protection actions have been taken.
 - ☐ Identify the location of the On-site Command Post (OSCP) and any Emergency Operations Centres (EOCs).
- ☐ Activate the MEP, when required.
- ☐ Manage the Local Authority's emergency response.
- ☐ Activate the emergency public warning system to alert people to life threatening hazards, as required.
- ☐ Activate the Municipal EOC (MEOC), as required. ☐ May dispatch a representative to the Government EOC (GEOC), when it is established, to coordinate the response, if requested.
- ☐ If necessary, declare a local State of Emergency.
- ☐ When possible, work with all other responders to establish a single Regional EOC (REOC).
- ☐ Inform EMBC and the public when the emergency is over.

RCMP

- ☐ Maintain law and order and assist the operator with security.
- ☐ Assist with mobilization of additional resources as directed by EMBC. ☐ Assist with traffic control, evacuation, and residence security.
- ☐ Assist with setting up and maintaining roadblocks or closures of 1, 2 and 3 digit Provincial or Secondary highways.
- ☐ Establish and maintain communications with industrial operator.
- ☐ Dispatch a representative to the off-site Regional Emergency Operations Centre, when established, to coordinate the response.
- ☐ Coordinate with the industrial operator both the establishment and the administration of reception centres for evacuees.
- ☐ Maintain a 24 hour emergency contact number where resources can be accessed for a response related to Emergency Response Plans.

- ☐ Respond to and assess emergency incident to the scope of their abilities.
- ☐ Establish a unified OSCP / ICP (On-site Command Post / Incident Command Post).
- Communicate to MEOC and provide site reps as required. ☐ Assist with fire protection where trained personnel are available.
- ☐ Provide emergency medical assistance, as required.
- ☐ Coordinate news releases with the licensee, if required.

- ☐ The BC Ambulance Service provides and coordinates ambulance service s within British Columbia, including triage, treatment, transportation
- ☐ The BC Ambulance Service provides situational awareness and coordinates resources through the PREOCs and PECC.
- ☐ Provide medical aid and transportation of ill or injured workers to a medical facility during high risk operations as required under the WCB Act and WSBC Regulations

☐ Complete a "lessons learned" process based on the scope of involvement and provide any feedback to the industrial operator.

After the Incident

☐ Close EOC if established.

May audit licensee records.

☐ As requested by OGC

Participate in event debriefings.

☐ Receive and review Post-Incident reports

any feedback to the industrial operator.

Participate in multi-agency debriefings.

☐ Participate in multi-agency debriefings.



- ☐ Provide emergency medical assistance, as required.

Northern

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Before the Incident

Northern Health is the regional health authority responsible for providing health services to 300,000 people over an area of 600,000 square kilometers in the province of British Columbia. Services include:

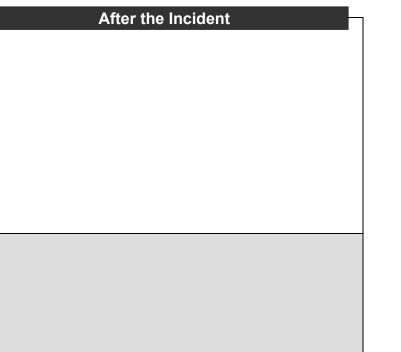
- ☐ Acute (hospital) Care
- ☐ Public Health (Protection, Preventive and Population Health services
- ☐ Mental Health and Addictions
- ☐ Home and Community Care
- □ In the event of a major emergency/disaster, Northern Health will provide health care services within its capacity, and will activate its emergency response management plan(s).
- □ Participate with industry, local authority and other partners in the development of their Emergency Response Plans as it relates to health authority roles and responsibilities.
- ☐ Participate in stakeholder training and exercises associated with activation of an Emergency Response Plan, in which Northern Health or HEMBC have a role and responsibility.

The Police and Community Safety Branch of the Ministry of Justice will work with FMRC to:

- ☐ Prepare, promulgate and implement orders relating to law enforcement and internal security.
- ☐ Provide through the jurisdictional police force:
 - ☐ Advice to local authorities respecting the maintenance of law and order
 - ☐ Reinforcement of local police services
 - ☐ Security control of emergency areas; and
 - ☐ Traffic and crowd control
- ☐ The Ministry of Justice provides legal services to the government. Policy direction and legislative changes are made in consultation with the Ministry of Justice. During emergencies or disasters the Ministry of Justice may be called on to assist with risk management and provide expertise. This could include providing advice to provincial ministries and government corporations on legal matters relating to the preparation and promulgation of emergency orders, regulations, declarations and contractual arrangements.

During the Incident

- ☐ Activate internal emergency response management plans related to ongoing provision of its services
- ☐ Provide acute care and emergency services at existing Northern Health hospitals/health centres.
- □ Work with BC Emergency Health Services (Ambulance) and the BC Patient Transfer Network to transport patients to the appropriate levels of care.
- ☐ Apply and enforce the Public Health Act, and associated regulations.
- □ Provide advice/information to the stakeholders on the existing or potential public health effects of an incident (including drinking water safety, air quality, environmental contaminants, communicable disease prevention, re-occupancy of evacuated areas, etc.).
- ☐ Provide advice/information on the best methods for monitoring health effects from an incident.
- ☐ Assist in development of (joint) messaging for public information on emergency incidents.
- ☐ Provide guidance to stakeholders and local authorities on public health considerations in operating reception and evacuation centres, and group lodging facilities.
- ☐ Jurisdictional police forces to task search and rescue services for missing persons on land and in inland waters.
- Before, during and after an emergency the Ministry of Justice could be called upon to provide expertise, technical advice and/ or policy direction regarding police and correctional services.
- ☐ The Minister of Justice has overall responsibility for emergency management in the province. In the event of a disaster, the Minister may:
 - ☐ Declare a provincial state of emergency
 - ☐ Make a formal written request for federal assistance or aid from the Government of Canada
 - ☐ Direct the establishment of M-DEC
 - ☐ Inform his/her colleagues of the situation, and
 - ☐ Be available for media interviews



H₂Safety





Emergency Response Roles & Responsibilities

Health Emergency Management BC, North (HEMBC)

HEMBC is a program under the Provincial Health Services Authority (PHSA). HEMBC provides the expertise, education, tools, and support specifically for the BC Health Sector to effectively mitigate, prepare for, respond to, and recover from the impacts of emergency events; ensuring the continuity of health services. There is a HEMBC team in each BC health authority. HEMBC-North deals specifically with Northern Health.

Roles and responsibilities:

- Maintain a 24-hour emergency/on call contact number for notification and activation of the health system in Northern BC (appendix I)
- Notify/activate the appropriate Northern Health programs (i.e. Public Health, Acute Care, etc.) based on the nature of the incident/emergency event.

Northern Health Authority (NH)

Northern Health is the regional health authority responsible for providing health services to 300,000 people over an area of 600,000 square kilometers in the province of British Columbia. Services include:

- Acute (hospital) Care
- Public Health (Protection, Preventive and Population Health services)
- Mental Health and Addictions
- Home and Community Care

In the event of a major emergency/disaster, Northern Health will provide health care services within its capacity, and activate its emergency response management plan(s).

NH Roles & responsibilities - PREPAREDNESS (PRE-EVENT):

- Participate with industry, local authority and other partners in the development of their Emergency Response Plans as it relates to health authority roles and responsibilities:
- Participate in stakeholder training and exercises associated with activation of an Emergency Response Plan, in which Northern Health or HEMBC have a role and responsibility (as resources allow);

Author(s): Northern Health Emergency Management Issuing Authority: Northern Health Chief Medical Health Officer Date Issued (I), REVISED (R) Reviewed (r) (I) July 5, 2016,; (R) Oct 5, 2016,; (r) Sept, 2018,; (R) Feb, 2019.





NH Roles & responsibilities - RESPONSE:

- Activate internal health emergency management plans related to ongoing provision of services (listed above);
- Provide acute care and emergency services at existing Northern Health hospitals/health centres:
- Work with BC Emergency Health Services (Ambulance) and the BC Patient Transfer Network to transport patients to the appropriate levels of care;
- Apply and enforce the Public Health Act, and associated regulations;
- Provide advice/information to the stakeholders on the existing or potential public health effects of an incident (including drinking water safety, air quality, environmental contaminants, communicable disease prevention, re-occupancy of evacuated areas, etc.);
- Provide advice/information on the best methods for monitoring health effects from an incident.
- Assist in development of (joint) messaging for public information on emergency incidents:
- Provide guidance to stakeholders and local authorities on public health considerations in operating reception and evacuation centres, and group lodging facilities

NOTE: British Columbia Emergency Health Services (BCEHS - Ambulance) remains independent of Northern Health. If an ambulance is required please contact BCEHS via 911 (or the local contact number, if 911 is not available in your area).





Appendix I

Contact information:

- For Emergency events that require immediate connection with Northern Health, please call:
 - HEMBC on call number (24/7) 1-855-554-3622
 - HEMBC will notify/activate the appropriate Northern Health programs (i.e. Public Health, Acute Care, etc.) based on the nature of the event/emergency.
 - Please include this number in industry ERPs, for the use of permit holders in contacting Northern Health on an emergency basis.
 - Do NOT include this number on Public Awareness Pamphlets for individual projects; the EMBC/Oil and Gas Commission's emergency number(s) is more appropriate, and the HEMBC 24/7 number is on record with those agencies.
- For non-urgent requests or emergency exercise planning/information, contact HEMBC North Director Jim Fitzpatrick, at:

o Office: 250-565-5584

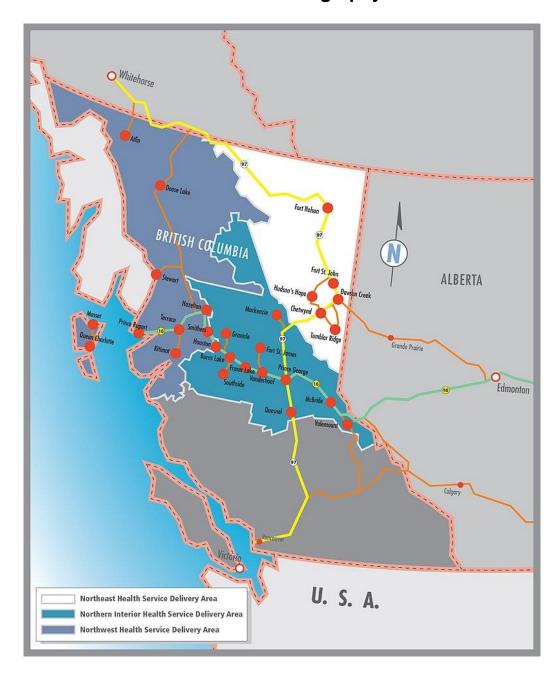
- HEMBC@northernhealth.ca
- Please note that Northern Health does not review or approve emergency response plans (ERPs) unless there is a request made from the regulators or governing agencies (e.g. Oil and Gas Commission, National Energy Board, Ministry of Environment, Environmental Assessment Office, etc.). Northern Health also does not require that general stakeholder consultation/notification packages be sent to Northern Health.
- Please make your site and project ERPs available to Northern Health in the event of an emergency to: <u>HEMBC@northernhealth.ca</u>
- For Environmental assessment inquires and general government consultation questions pertaining to health please email the NH Office of Health and Resource Development at: resource.development@northernhealth.ca





Appendix II

Northern Health Geography







EMERGENCY MANAGEMENT BC

EMERGENCY RESPONSE ROLES & RESPONSIBILITIES

Before An Emergency

- Assist the OGC with planning initiatives regarding upstream petroleum industry emergency response as requested by the OGC
- EMBC Northeast Region receives Industry Facility Emergency Response Plans.
- Participate in selected licensee ERP exercises when requested as time permits.
- Maintain a 24-hour 800 telephone contact where petroleum industry spill incidents can be reported.
- Maintain 24-hour emergency contact numbers for local governments and provincial emergency responders.

During an Emergency

- ECC Victoria will notify the OGC on call Emergency Response Officer and initiate
 British Columbia's notification of government agencies including MOF, MOE,
 MOT, Health Unit, WorkSafe BC, affected municipalities and all other level of
 government and industry, depending on the level of "coding" (notification Code:
 1,2,3 is determined by the Lead Agency MOE or OGC); depending on the code
 level Standard Operating Procedures (SOP's) in ECC will determine who is
 notified).
- Provide representatives to help coordinate provincial response as required.

After an Emergency

As requested by OGC.

Local Authority (Regional District)

Peace River Regional District has a formal Emergency Management Plan which outlines the measures and sources of assistance that can be obtained to support emergency response efforts within their jurisdiction. Upon request from the Oil and Gas Commission (OGC), the Regional District may address emergency response capabilities, expectations and preparedness. If required, the Regional District may activate their emergency plan in order to achieve any of the following:

- Dispatch representative(s) to the OGC's Emergency Operations Centre (EOC), if established
- Provide support to ensure notification of endangered area residents.
- Provide support to coordinate and deliver emergency social services to evacuated residents
- If necessary, declare a State of Local Emergency and issue an evacuation Alert, Order and Rescind
- Assist in a public information service (joint OGC, Industry, local government)
- Provide building re-entry procedures.

Revised October 27, 2010



Before the Event

LOCAL AUTHORITY - NORTHERN ROCKIES REGIONAL MUNICIPALITY

Resources would be provided in support of an upstream emergency on an "as available" basis and in accordance with Local Authority Policy.

0	Work with the upstream operator to effectively prepare for an upstream petroleum industry incident. Provide input to the industrial operator's site-specific plan to ensure it is compatible with the Municipal Emergency Plan (MEP) where feasible. Participate in industrial operators' preparatory training and exercises where possible. Train personnel to carry out functions as assigned by MEP or procedures. Maintain 24 hour emergency contact numbers.
Upon t	he Notification of and during an Event
	Respond to and assess the emergency incident only in the Northern Rockies Regional Municipality fire protection area for fires.
	Response to rescue & hazard incidents anywhere within the municipality, where feasible. Establish contact with the industrial operator in order to: Obtain additional hazard information. Determine where roadblocks should be or are established. Determine the direction of approach to the incident. Determine if there are any injuries. Find out what response and public protection actions have been taken by the upstream operation. The location of the On-site Command Post (OSCP) and any Emergency Operations Centres (EOCs).
	Activate the MEP, when required. Manage the Local Authority's emergency response. Activate the Municipal EOC (MEOC), as required. If necessary, declare a State of Local Emergency. Establish a public information service, including the use of the news media to inform and instruct the public of the emergency and of any protective actions to be taken. Inform EMBC and the public when the emergency is over.
After ti	he Event
<u> </u>	Complete a "lessons learned" process based on the scope of involvement and provide any feedback to the industrial operator. Participate in multi-agency debriefings.



Emergency Services (as managed / operated by the Local Authority)

Emergency Services will also, as a general rule, provide resources in support of a petroleum incident, on an "as available" basis.

Before	the Event
	Maintain readiness status for emergency notification. Participate in industrial operators' exercises where possible.
	Maintain 24 hour emergency contact numbers.
During	the Event
	Respond to and assess emergency incident to the scope of their abilities. Establish a unified OSCP / ICP (On-site Command Post / Incident Command Post). Communicate to MEOC and provide site reps as required. Assist with fire protection where trained personnel are available. Provide emergency medical assistance, as required. Coordinate news releases with the licensee, if required.
After th	ne Event
	Complete a "lessons learned" process based on the scope of involvement and provide any feedback to the industrial operator.
	Participate in multi-agency debriefings.

	les
☐ Participate in event debriefings. ☐ Complete a "lessons-learned" process based on the scope of their involvement	Ro
and the outcome.	gency Roles
☐ Work with appropriate local and federal entities to facilitate the restoration of roadways and utilities.	Aç
	porting

Before the Incident

 $\hfill\Box$ Provide regulatory oversight and monitor the situation to ensure that the Responsible Party (RP) is taking appropriate actions.

Can liase with FLNRO to provide:

- Species and ecosystem protection policy.

Ministry of Environme

- □ Water protection and sustainability policy
- ☐ Conservation and resource management enforcement

- ☐ Five key agencies are housed within the Ministry of Forests, Lands and Natural Resource Operations: Wildfire Management Branch, Dam Safety, Flood Safety, GeoBC and the River Forecast Centre.
- ☐ Develop, deliver and promote innovative and effective wildfire management practices to clients.
- ☐ Maintain a 24 hour emergency contact number where resources can be accessed for a response related to Emergency Response Plans.
- ☐ The Ministry of Forests, Lands and Natural Resource Operations is identified to provide personnel, equipment, supplies, telecommunications equipment. aviation support and weather information to assist in emergency response operations.
- ☐ The Ministry of Forests and Range is the designated key agency for wildfires.
- ☐ Maintain a 24 hour emergency contact number where resources can be accessed for a response related to Emergency Response Plans.
- ☐ In the event of an emergency, the Highway Department's Operations, Maintenance and Re- construction team plays an important role to ensure the public is safe and transportation routes are available for accessing emergency
- ☐ Ministry of Transportation and Infrastructure oversees provincial highways identified as emergency response routes - a network of pre-identified routes that can best move emergency services and supplies to where they are needed in response to a major disaster.
- of Transportation Infrastructure ☐ Disaster Response Routes (DRRs) are a critical part of the overall emergency transportation system.
 - ☐ Responsible for the construction, maintenance and operation of public roads.

The Roles & Responsibilities listed below for Public Services and Procurement Canada (PSPC) are only in relation to the Alaska Highway (97) in British Columbia, north of mile 83.5 (km 133) to the border of British Columbia and Yukon Territories at km 968.

In conjunction with the BC Ministry of Transportation & Infrastructure (MOTI) and the provincial maintenance contractor, PSPC may:

- ☐ Maintain a 24 hour emergency contact number where resources can be accessed for a response related to Emergency Response Plans.
- ☐ Hold responsibility for the acquisition of contracts for the maintenance and operation of the Alaska Highway.
- Oversee Alaska Highway response routes a network of pre-identified routes that can best move emergency services and supplies to where they are needed in response to a major disaste

During the Incident

Before, during and after an emergency the Ministry of Environment could be called upon to provide expertise, technical advice and/or policy direction regarding:

- ☐ Environmental emergency response (including hazardous materials)
- ☐ Air, land and water quality standards
- ☐ Pollution prevention and waste management
- ☐ Water and air monitoring and reporting
- ☐ Environmental assessment
- □ Environmental monitoring
- ☐ Parks, wilderness and protected areas.
- ☐ Provide regulatory oversight and monitor the situation to ensure that the Responsible Party (RP) is taking appropriate actions.
- ☐ May provide a representative to the Incident Command Centre, the Off-Site Command EOC and the OGC Emergency Operations Centre (EOC) and / or the Provincial Emergency Operations Centre (PREOC) on a 24-hour basis.
- ☐ In a larger scale incident, based on risk, additional ministry resources such as IMTs (Incident Management Teams) may be deployed to establish unified command and monitor, augment, or take over the response if the RP fails to take appropriate action as deemed necessary by the EERO or Provincial Incident Commander.
- May assist the RP to ensure that other required agencies and affected stakeholders are contacted.
- ☐ May provide assistance with hazardous waste management.
- ☐ May conduct sampling for monitoring and enforcement purposes.

Before, during and after an emergency the Ministry of Forests, Lands and Natural Resource Operations could be called upon to provide expertise, technical advice and/or policy direction regarding:

- ☐ Forest stewardship policy
- ☐ Land use planning
- ☐ Water use planning and authorizations
- □ Drought management
- ☐ Dam and dike safety and regulation
- ☐ Flood plain management
- ☐ GeoBC and information management
- ☐ Pests, disease, invasive plants and species
- □ Wildfire management

Before, during and after an emergency the Ministry of Transportation and Infrastructure (MoTI) could be called upon to provide expertise, technical advice and/or policy direction regarding:

- ☐ Highway construction and maintenance
- ☐ Safety and protection of provincial road and bridge infrastructure
- ☐ Transportation planning and policy

■ MoTI can:

- ☐ Authorize the closure of provincial transportation routes, including highways and inland ferries, where the safety of the public is at risk.
- ☐ Assist in public notification through the DriveBC website, as well as posting advisories on overhead message boards along designated routes.
- ☐ Coordinate and arrange for transportation, engineering and construction resources.
- ☐ Rebuild and restore provincial highways that are impacted by an emergency.
- ☐ Major agencies, boards and commissions within MoTI that have identified responsibilities within the Emergency Program Management Regulation are BC Rail, BC Transit and BC Ferries.
- ☐ During an emergency, BC Rail will:
 - ☐ Provide priority movement of emergency personnel, equipment and supplies.
 - ☐ In cooperation with Transport Canada, assist in railway crashes and derailments in the conduct of rescue operations, removal of debris and the cleanup of hazardous material.
 - ☐ Provide railcars for emergency facilities.
 - ☐ Provide specialized equipment.
- ☐ During an emergency, BC Transit will coordinate requirements for public transportation, including school and privately owned
- ☐ During an emergency, BC Ferries is required to provide priority loading for emergency personnel, equipment and supplies and ensure ferries are available to serve as reception centres, hospitals, response centres or other emergency facilities.

In conjunction with the BC Ministry of Transportation & Infrastructure (MOTI), PSPC, and the provincial maintenance contractor may be called upon to:

- ☐ Provide expertise, technical advice and/or policy direction regarding:
 - ☐ Highway construction and maintenance ☐ Safety and protection of provincial road and bridge infrastructure
- ☐ Transportation planning and policy
- ☐ Play an important role to ensure the public is safe and transportation routes are available for accessing emergency services.
- ☐ Assist in the coordination of roadblock locations along the highway.
- ☐ Authorize closure of the Alaska Highway where the safety of the public is at risk.
- ☐ Assist in public notification of an emergency through the MOTIs DriveBC website, as well as posting advisories on overhead message boards along designated routes.
- ☐ Coordinate and arrange for transportation, engineering and construction resources.
- ☐ Handle inter-departmental communication as needed during energy resources industry emergencies.
- ☐ Maintain ability to process calls for new emergencies.
- ☐ Provide information on the impacts to transportation routes.
- Provide response support if dangerous goods are released.

After the Incident

- ☐ Work with appropriate local and federal entities to facilitate the restoration and re-opening of the Alaska Highway. Complete a "lessons learned" process based on the scope of involvement and
- provide any feedback to the industrial operator.
- ☐ Provide a summary of transportation impacts during the post incident review
- ☐ Participate in multi-agency debriefings



H₂Safety Revised April 2020 *MFLNRO - Ministry of Forests, Lands and Natural Resource Operations *PSPC - Public Services and Procurement Canada

ency

Before the Incident

- ☐ Provide public health measures, including epidemic control and immunization programs.
- Provide and coordinate ambulance services and triage, treatment, transportation and care of casualties.
- ☐ Provide the continuity of care for patients evacuated from hospitals or other health institutions and for medically dependant patients from other care facilities
- ☐ Provide standard medical units consisting of emergency hospitals, advanced treatment centres, casualty collection units and blood donor packs.
- ☐ Monitor potable water supplies.

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- ☐ Inspect and regulate food quality with the assistance of the Minister of Agriculture.
- ☐ Provide critical incident stress debriefing and counselling services.
- ☐ Provide support services for physically challenged or medically disabled people affected by an emergency.
- ☐ Maintain a 24 hour emergency contact number where resources can be accessed for a response related to Emergency Response Plans.
- ☐ Provide input on public health issues related to a petroleum incident.

WorkSafeBC is a provincial body set up to maintain a safe, healthful working environment at job sites throughout the province. In addition to providing employers and workers with guidance and assistance when they are setting up health and safety programs, WorkSafeBC, has specific workplace responsibilities.

Under the Workers Compensation Act, WorkSafeBC is responsible for:

- ☐ Inspecting places of employment.
- ☐ Investigating accidents and the causes of industrial diseases.
- ☐ Issuing orders and directions specifying means of preventing injuries and industrial disease.
- ☐ Assisting and advising employers and workers in developing health and safety programs.
- ☐ Educating workers about health and safety.
- ☐ Providing living allowances, rehabilitation, and retraining for workers injured on the job.
- ☐ Collecting contributions to an accident fund from employers and distributing money from the fund to injured workers.
- ☐ Maintain a 24 hour emergency contact number where petroleum industry incidents can be reported.
- ☐ Receive Emergency Response Plans.
- ☐ Attend critical sour well meetings.

Examples of emergency management activities carried out by the Ministry of Agriculture are:

- ☐ Providing advice to farmers, aqua-culturalists and fishers on the protection of crops, livestock and provincially managed fish and marine plant stocks.
- ☐ Through EMBC, provide support to impacted agricultural industries and coordinate support and/or managing agricultural animal relocation
- ☐ Assisting the Ministry of Health with inspection and monitoring of food safety and quality.
- ☐ Coordinate with Canadian Food Inspection Agency the response to animal disease and plant health.
- ☐ Administering provision of crop insurance to cover damage from disasters or emergencies.
- ☐ Technical Safety BC (formerly BC Safety Authority) is an independent, selffunded organization mandated to oversee the safe installation and operation of technical systems and equipment across the province.
 - ☐ In addition to issuing permits, licenses and certificates, we work with industry to reduce safety risks through assessment, education and outreach, enforcement, and research.

Health Emergency Management BC (HEMBC) is a program under the Provincial Health Services Authority (PHSA). HEMBC provides the expertise. education, tools, and support specifically for the BC Health Sector to effectively mitigate, prepare for, respond to, and recover from the impacts of emergency events; ensuring the continuity of health services. There is a HEMBC team in each BC health authority. HEMBC-North deals specifically with Northern Health

☐ Maintain a 24-hour emergency/on call contact number for notification and activation of the health system in Northern BC.

During the Incident

Before, during and after an emergency the Ministry of Health could be called upon to provide expertise, technical advice and/or policy direction regarding.

- ☐ Health service delivery
- ☐ Public health planning and response
- ☐ Community and home support services
- □ Mental health
- ☐ Communicable disease prevention
- ☐ During an emergency the Ministry of Health will provide the continuity of care both for patients evacuated from hospitals or other health institutions and for medically dependent patients from other care facilities; The Ministry will also provide emergency psychosocial services.
- Ensure appropriate Health entities have been notified of the incident.
- ☐ Ensure appropriate Executive and Public Health personnel have been notified of the incident.
- ☐ Carry out evacuation of medically dependent and vulnerable populations, as needed
- ☐ Transport incident casualties as required.
- ☐ Triage and provide medical care to incident casualties as required.
- ☐ Decontaminate incident casualties that present to health care facilities, as needed.
- ☐ Relay health hazard information to the public.
- ☐ Monitor water and air quality, as it relates to public health.
- ☐ Coordinate the public health response to the incident.
- ☐ Address the psychosocial aspects of the aftermath of an event. ☐ Arrange with Health Canada and the Public Health Agency of Canada for federal support, if needed.

Employer must immediately report the following types of incidents to WorkSafeBC's emergency and accident reporting phone line whether there is an injury or not:

- ☐ Any incident that kills, causes risk of death, or seriously injures a worker
- ☐ Any blasting accident that results in injury, or unusual event involving explosives
- ☐ A diving incident that causes death, injury, or decompression sickness requiring treatment
- ☐ A major leak or release of a dangerous substance
- ☐ A major structural failure or collapse of a structure, equipment, construction support system, or excavation
- ☐ Any serious mishap
- Employer must also report incidents that require the employee to seek medical attention or cause time-loss from work.

After the Incident

- Participate in event debriefings.
- □ Complete a "lessons-learned" process based on the scope of their involvement and the outcome.
- ☐ Continue with public health and environmental health monitoring as required.
- ☐ Continue to address the psychosocial aspects of recovery.

- ☐ Prompt investigation of incidents should be conducted so that other employees will not get injured in the same way. Everyone in the business has a role to play, and you must report accidents and incidents to your supervisor.
- ☐ According to the Regulation, an employer must immediately undertake an investigation into the cause of any accident or other incident that:
 - ☐ Is required to be reported under the Act?
 - ☐ Results in injury to a worker requiring medical treatment?
 - ☐ Does not involve injury to a worker, or involves only minor injury not requiring medical treatment, but has a potential for causing serious injury to a worker?
 - ☐ Is an incident required by regulation to be investigated?
 - ☐ Submit an employer's incident investigation report to WorkSafe BC.

Before, during and after an emergency the Ministry of Agriculture may be called upon to provide expertise, technical advice and/ or policy direction regarding:

- ☐ Agriculture
- ☐ Aquaculture and food industry development
- ☐ Animal health
- □ Crop/plant protection
- ☐ Food safety and quality
- ☐ Crop insurance
- Technical Safety BC implements a business continuity plan in the event of a natural disaster. This plan ensures that Technical Safety BC resumes safety services as soon as possible.
- Though Technical Safety BC is not a first responder, they will provide technical support including inspection services to the recovery team relating to the technical equipment and systems covered by the Safety Standards Act (e.g., gas, electrical, elevating devices, boiler and pressure vessel technologies) after first ensuring the safety of its employees.
- 🗖 Starting in the planning phase and through collaboration with other agencies, Technical Safety BC can provide most value to the public and best support the other agencies.
- ☐ For emergency events that require immediate connection with Northern Health, please call HEMBC on call (24/7) 855-554-3622. HEMBC will notify / activate the appropriate Northern Health programs (ie. Public Health, Acute Care etc.) based on the nature of the event / emergency. Please include this number in industry ERPs for the use of permit holders in contacting Northern Health on an emergency basis.
- □ Notify/activate the appropriate Northern Health programs (i.e. Public Health, Acute Care, etc.) based on the nature of the incident/emergency event.

- ☐ Technical Safety BC tracks and investigates incidents and hazards that are reported to inform awareness and prevention initiatives
- ☐ Technical Safety BC does not investigate all reported incidents and may not follow-up with a notification unless there is an intention to investigate.
- ☐ Technical Safety BC will contact duty holders within 24 hours of the next regular business day following the report of an incident if more information is required or an investigation is planned to occur.



During the Incident

During an environmental emergency, The National Environmental Emergencies Centre (NEEC) is the focal point for ECCC.

ECCC's services during an environmental emergency:

Janad

Provincial specific FNIHB roles & responsibilities will be found in this section of the ERP, if applicable or as appropriate.

Before the Incident

Environment & Climate Change Canada's Environmental Emergencies Program (EEP)

protects Canadians and their environment from the effects of environmental emergencies

through provision of science-based expert advice and regulations.

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¥EC

NAV Canada

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Sublic Health ency of Canada

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agreements involving First Nation band councils, oil and gas companies, and Indian Oil and Gas Canada.

Additional information is available at: http://www.pgic-iogc.gc.ca/eng/1100110010458/1100110010464

Acts and Regulations: https://www.pgic-iogc.gc.ca/eng/1100110010437/1100110010438

IOGC operates pursuant to the Indian Oil and Gas Act and Indian Oil and Gas Regulations, 1995, as well as other relevant

legislation and guidelines (see Acts and Regulations). Oil and gas activity on First Nation reserve lands depends on

After the Incident

☐ Provide specialized advice in shoreline clean-up assessment techniques (SCAT).

ECCC can conduct post-emergency assessments

☐ Provide Advise on mitigation and cleanup measures...

anada

Transport Car *CANUTEC

☐ Maintain a 24 hour emergency telephone service.

☐ Federal regulations require that CANUTEC be contacted in the event of an

Emergency Response Assistance Canada (ERAC) is a not for profit cooperative

organization built by industry for industry providing safe, timely effective, sustainable,

cost effective flammable liquids and gases emergency preparedness and response

☐ ERAC will act on behalf of the Plan Participant to develop, submit, update, and

ERAC provides a network of experienced, trained Technical Advisors (TAs),

Remedial Measures Advisors (RMAs) and Response Teams who respond to rail,

road and stationary tank incidents involving flammable gases, Class 2.1 Liquefied

Petroleum Gas (LPG) emergencies and Flammable Liquids Class 3 rail transport

and road cargo tank transport emergencies. The emergency responders are

Once a year, there is Regional Training that is held in each region for the

Remedial Measures Advisors, Technical Advisors, Response Team Leaders,

Alternate Team Leaders as well as all Response Team Members to test their

skills and update them on any new developments. Also, once every two years,

National Training Session is held for all the Remedial Measures Advisors,

Technical Advisors, Response Team Leaders and Alternate Team leaders across

☐ Public Safety Canada works with provincial and territorial officials to ensure first

responders and emergency management personnel are well-prepared through

Responsible for promoting and coordinating the preparation of departmental

response to an emergency through the Government Operations Centre (GOC).

emergency management plans as well as coordinating the government's

constantly available through a 24 hour activation telephone number.

respond to the requirements of the Plan Participant ERAP submitted to and

incident or accident involving dangerous goods and infections substances.

☐ Maintains records of over 3 million Safety Data Sheets (SDS).

assistance to all Plan Participants and Stakeholders of ERAC.

approved by Transport Canada.

Canada.

Emergency

Before the Incident **During the Incident**

□ Regulate the handling, offering for transport and the transport of dangerous ☐ Assist emergency response personnel in handling dangerous good emergencies including advice on goods by all modes in order to ensure public safety. ☐ Chemical, physical and toxicological properties and incompatibilities of the dangerous goods

☐ Health hazards and first aid

☐ Fire, explosion, spill or leak hazards

☐ Remedial actions for the protection of life, property and the environment

■ Evacuation distances

☐ Personal protective clothing and decontamination

□ CANUTEC staff does not go to the site of an incident, however, should on-site assistance be required, CANUTEC can assist in the activation or industry emergency response plans.

☐ Provide communication links with the appropriate industry, government or medical specialists.

Provides emergency response to plan participants who transport the following products by road or rail, or those who store these products in tanks with capacities of 450 litres or greater. These products are gases at standard temperatures and pressure, and include: Propane (UN1978), Butane (UN1011), Propylene (UN1077), Butylene (UN1012), Isobutene (UN1969), Isobutylene (UN1055), and NGL (UN1075). It is recognized that these products may contain a concentration of condensate and/or quantities of other elements including hydrogen sulphide.

☐ Response is also provided to emergencies involving Butadiene – 1,3 (stabilized) (UN1010).

In addition we respond to the following Flammable Liquids transported by rail only: UN1170 Ethanol UN1987 Alcohols, N.O.S.

UN1202 Diesel Fuel UN1993 Flammable Liquid, N.O.S. UN1203 Gasoline UN3295 Hydrocarbons, Liquid, N.O.S. UN1267 Petroleum Crude Oil UN3475 Ethanol and Gasoline Mixture

UN1268 Petroleum Distillates N.O.S. UN3494 Petroleum Sour Crude Oil, Flammable, Toxic

UN1863 Fuel Aviation, Turbine Engine

☐ If LPG/Flammable Liquid Incident, Emergency Call Centre Operator receives an activation (notification) phone call

☐ Emergency Call Centre Operator sends group email to Home Based Coordinator.

☐ Home Based Coordinator / Technical Advisor conferenced into call to assist with information gathering.

Caller requires technical advice.

☐ Home Based Coordinator / Technical Advisor provides technical advice.

☐ Caller requests response team.

☐ Confirm plan participant involvement

Plan participant notified of activation.

☐ Home Based Coordinator / Technical Advisor activate plan.

☐ Mobilization phase ERAC-002.

□ Initial incident size-up.

☐ Damage and spill assessment.

☐ Develop Incident Action Plan.

☐ Execute IAP & initiate planning for next operational period.

☐ Update Emergency Call Centre Operator and Home Based Coordinator.

☐ Public Safety Canada houses the Government Operations Centre at the hub of the national emergency management system. It's an advanced centre for monitoring and coordinating the federal response to an emergency

After the Incident

☐ Maintain voice communication and written information records for two years for the protection of all parties.

- ☐ Terminate and de-mobilize
- ☐ Post-incident assessment and communication program.

☐ In the event of a large-scale natural disaster where response and recovery costs exceed what individual provinces and territories could reasonably be expected to bear on their own, PS provides financial assistance to the provincial and territorial governments through the Disaster Financial Assistance Arrangements (DFAA). Assistance is paid to the province or territory - not directly to individuals or communities. The provincial or territorial governments design, develop and deliver disaster financial assistance, determining the amounts and types of assistance that will be provided to those who have experienced losses.

*Canada Energy Regulator Roles & Responsibilities

The CER's top priority in any emergency is to make sure that people are safe and secure, and that property and the environment are protected. Any time there is a serious incident, CER inspectors may attend the site to oversee a company's immediate response. The CER will require that all reasonable actions are taken to protect employees, the public and the environment. Further, the CER will verify that the regulated company conducts adequate and appropriate clean-up and remediation of any environmental effects caused by the incident.

As lead regulatory agency, the CER:

education, support and exercises

- Monitors, observes and assesses the overall effectiveness of the company's emergency response in terms of:
 - Emergency Management
 - Safety
 - Security
 - Environment
 - Integrity of operations and facilities; and
 - Energy Supply.
- ☐ Investigates the event, either in cooperation with the Transportation Safety Board of Canada, under the Canada Labour Code, or as per the National Energy Board Act or Canada Oil & Gas Operations Act (whichever is applicable)
- ☐ Inspects the pipeline or facility
- Examines the integrity of the pipeline or facility
- Requires appropriate repair methods are being used
- Appropriate environmental remediation of contaminated areas is conducted
- Coordinate stakeholder and Aboriginal community feedback regarding environmental clean-up and remediation
- Confirms that a company is following its Emergency Procedures Manual (s), commitments, plans, procedures, and CER regulations and identifies non-compliances
- Initiates enforcement actions as required
- Approves the restart of the pipeline.

If applicable; refer to the CER site section behind the blue Area Specific Information tab for further regulations, definitions and, reporting guidelines for CER related incidents specific to this ERP.

*Transportation Safety Board Mandate

The Canadian Transportation Accident Investigation and Safety Board Act provides the legal framework that governs TSB activities. Our mandate is to advance transportation safety in the marine, pipeline, rail and air modes of transportation by:

- a conducting independent investigations, including public inquiries when necessary, into selected transportation occurrences in order to make findings as to their causes and contributing factors;
- ☐ identifying safety deficiencies, as evidenced by transportation occurrences;
- making recommendations designed to eliminate or reduce any such safety deficiencies; and
- reporting publicly on our investigations and on the findings in relation thereto.

As part of its ongoing investigations, the TSB also reviews developments in transportation safety, and identifies safety risks that they believe the government and the transportation industry should address to reduce injury and loss.

To instill confidence in the public regarding the transportation accident investigation process, it is essential that an investigating agency be independent and free from any conflicts of interest when investigating accidents, identifying safety deficiencies, and making safety recommendations. As such, the TSB is an independent agency, separate from other government agencies and departments, that reports to Parliament through the President of the Queen's Privy Council for Canada. Our independence enables us to be fully objective in making findings as to causes and contributing factors, and in making transportation safety recommendations.

In identifying the causes and contributing factors of a transportation incident, it is not the function of the Board to assign fault or determine civil or criminal liability. However, the Board does not refrain from fully reporting on the causes and contributing factors merely because fault or liability might be inferred from the Board's findings. No finding of the Board should be construed as assigning fault or determining civil or criminal liability. Findings of the Board are not binding on the parties to any legal, disciplinary, or other proceedings

Revised September 2019

http://www.bst-tsb.gc.ca/eng/qui-about/mission-mandate.asp





Section 6: Forms

Documentation During and After an Incident

Form Descriptions

Incident Command System (ICS) Forms

ICS 201 Incident Briefing

ICS 202 Incident Objectives

ICS 203 Organization Assignment List

ICS 204 Assignment List

ICS 207 Incident Organization Chart

ICS 208 Safety Message / Plan

ICS 209 Incident Status Summary

ICS 211 Check-In / Out List

ICS 214 Activity Log

ICS 215 Operational Planning Worksheet

ICS 215A IAP Safety Analysis

ICS 221 Demobilization Checkout

ICS 230 Meeting Schedule

ICS 231 Meeting Summary

ICS 233 Incident Open Action Tracker

Emergency Forms

A1 Initial Emergency Report Form

A2 Odour Complaint Script

A3 Regulatory First Call Communication

A4 Incident Action Plan Checklist

A5 Air Monitoring Log

A6 Threatening Call / Bomb Threat

A7 STARS Landing Zone Card

Resident Forms

B1 Reception Centre Registration Log

B2 Resident Compensation Log

B3 Resident Contact Log

B4 Roadblock Log

B5 Evacuation Notice

B6 Early Notification / Voluntary Evacuation Phone Message

B7 Shelter-In-Place Phone Message

B8 Evacuation Phone Message

Media Forms

C1 Preliminary Media Statement

C2 Media Contact Log

C3 Government Agency Contact Log

C4 Media Centre Site



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Documentation During and After an Incident

It is imperative that accurate documentation is kept throughout the duration of an incident for record keeping purposes. Records kept may be used for legal, investigation, audits, historical and/or analytical purposes. All documentation must be held for a minimum of 5 years as it may be requested by the regulatory agency at any point during that time.

It is the Documentation Units responsibility to collect documentation (forms, checklists, event logs, etc.) from response team members and maintain a consistent system for organizing the data.

Form Descriptions

The Incident Command System uses a series of standard forms and supporting documents that convey directions for the accomplishment of the objectives and distributing information. Listed below are the standard ICS form titles and descriptions of each form utilized.

Further ICS forms can be found through the ICS Canada website: http://www.icscanada.ca/en/forms.html.

Standard ICS Form Title	ICS Form Description					
ICS 201 Incident Briefing	Provides the Incident Command and General Staffs with basic information regarding the incident situation and the resources allocated to the incident. This form also serves as a permanent record of the initial response to the incident.					
ICS 202 Incident Objectives	Describes the basic strategy and objectives for use during each operational period.					
ICS 203 Organization Assignment List	Provides ICS personnel with information on the units that are currently activated and the names of personnel staffing each position.					
ICS 204 Assignment List	Informs Division and Group supervisors of incident assignments.					
ICS 207 Incident Organization Chart	A complete picture of the organizational structure for the incident.					
ICS 208 Safety Message / Plan	Expands on the Safety Message and Site Safety Plan.					
ICS 209 Incident Status Summary	Summarizes incident information for staff members and externa parties, and provides information to the Public Information Officer fo preparation of media releases.					
ICS 211 Check-In/Out List	Used to check in personnel and equipment arriving at or departing from the incident. Check-in / out consists of reporting specific information that is recorded on the form.					
ICS 214 Activity Log	Provides a record of unit activities. Unit Logs can provide a basic reference from which to extract information for inclusion in any afteraction report.					
ICS 215 Operational Planning Worksheet	Documents decisions made concerning resource needs for the next operational period. The Planning Section uses this Worksheet to complete Assignment Lists, and the Logistics Section uses it for ordering resources for the incident. This form may be used as a source document for updating resource confirmation on other ICS forms such as the 209 Incident Status Summary.					
ICS 215A Incident Action Plan Safety Analysis	Used to communicates to the Operations and Planning Section Chiefs the potential hazards identified by the Safety Officer. It identifies mitigation measures to address the identified hazards.					



Form Descriptions, continued

Standard ICS Form Title	ICS Form Description							
ICS 221 Demobilization Checkout	Ensures that resources checking out of the incident have completed all appropriate incident business, and provides the Planning Section information on resources released from the incident.							
ICS 230 Meeting Schedule	To record information about the daily scheduled meeting activities.							
ICS 231 Meeting Summary	Provides more detailed information concerning the attendees and notes from a particular meeting.							
ICS 233 Incident Open Action Tracker	Used by Command Staff to track time sensitive tasks / actions assigned to incident personnel.							

Emergency Form Title	Emergency Form Description
A1 Initial Emergency Report Form	Used by recipient of a phone call from either a member of the public or other company personnel to record detailed information about incident.
A2 Odour Complaint Script	Used to record odour information from a member of the public as well as scripts to follow.
A3 Regulatory First Call Communication	A regulatory required form used to send detailed information to the regulator about an emergency used for assessment, historical, and analytical purposes following an incident.
A4 Incident Action Plan Checklist	A checklist of other forms and information required to accurately create an incident action plan.
A5 Air Monitoring Log	A form used by designated Air Monitor personnel to log information about air quality readings.
A6 Threatening Call / Bomb Threat	Detailed point driven form used to document incoming phone calls pertaining to personnel threats and bomb threats.
A7 Stars Landing Zone Card	An information card utilized if medical evacuation is required via STARS Air Ambulance.

Resident Form Title	Resident Form Description
B1 Reception Centre Registration Log	Log used by Reception Centre Rep to record information from evacuees being received at the reception centre. Can also be faxed to reception centre in case a representative has not been identified or cannot make it before evacuees start arriving.
B2 Resident Compensation Log	Detailed spreadsheet for expenses incurred by evacuees so that compensation may be properly dealt with.
B3 Resident Contact Log	A log used by various company personnel to record contact made with residents, whether they're sheltered / evacuated and if assistance is required.
B4 Roadblock Log	A log used by designated Roadblock personnel to identify details about vehicles and persons entering or exiting a hazard area.
B5 Evacuation Notice	A document to be left in doors / windows of surface developments that are unable to be contacted as a way to issue evacuation instructions



Form Descriptions, continued

Resident Form Title	Resident Form Description
B6 Early Notification/Voluntary Evacuation Message	A script and document filled out by Telephoner personnel issuing calls to residents for early notification and voluntary evacuation purposes.
B7 Shelter-In-Place Message	A script and document filled out by Telephoner personnel issuing calls to residents with shelter-in-place instructions.
B8 Evacuation Phone Message	A script and document filled out by Telephoner personnel issuing calls to residents with evacuation instructions.

Media Form Title	Media Form Description
C1 Preliminary Media Statement	A generic script used by the Media Spokesperson to issue media statements until which time more detailed information is known and can be issued.
C2 Media Contact Log	A log used to identify what media outlets/persons have contacted the company and their contact information.
C3 Government Agency Contact Log	A log used to identify what government agencies have been notified about the incident.
C4 Media Centre Site	A document to distribute to media outlets/persons about the location for further media enquiries and press releases as well as details to get there.



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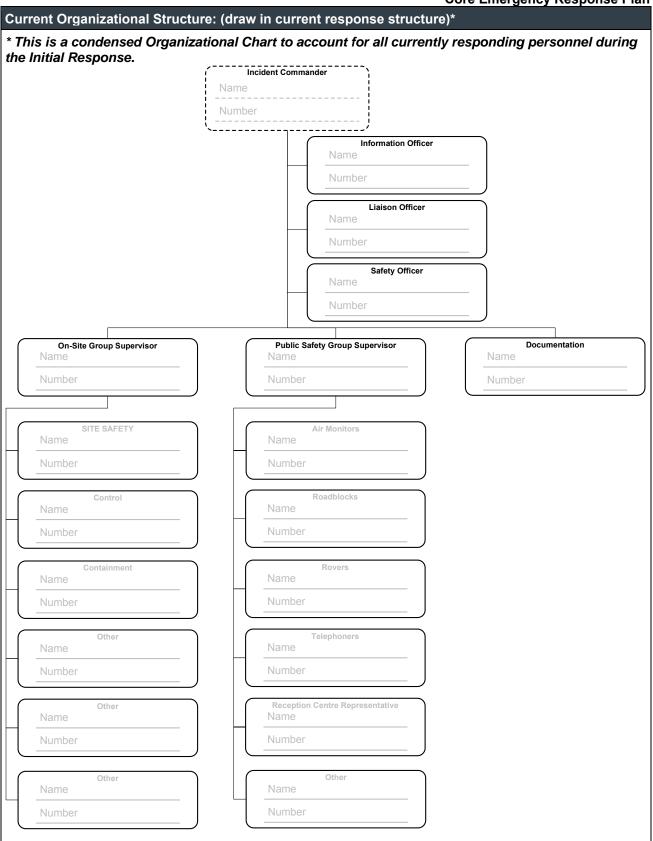
	Core Emergency Response Plan																											
In	Incident Name:																											
D	ate/	Time	e Ini	tiate	ed:																							
Pı	ера	ared	Ву:												IC	SP	ositi	on:										
Level of Emergency Alert / Minor Le								evel 1 Level 2 Level 3																				
Map Sketch: Note: Maps can be drawn																												
Ν	ote:	Maj	os c	an l	be a	lraw	n o	r att	ach	ed I	nere) <u>.</u>																
Si	tua	tion	Su	mm	ary	: (V	/rite	de	scri	iptic	on c	or at	tac	h A	1)													
Sa	afet	y Br	iefi	ng:																								



Core Emergency Response Plan **Current and Planned Objectives:** Priorities: (1) Life Safety (2) Incident Stabilization (3) Property & Environment 1. Ensure Safety of Citizens and Response Personnel: 4. Minimize Economic Impacts: ☐ 1a. Identify hazard(s) of released product. ☐ 4a. Consider tourism and local economic impacts. ☐ 1b. Establish site control (hot zone, warm zone, cold zone, & ☐ 4b. Protect public and private assets, as resources permit. ☐ 1c. Establish an Emergency Response Zone and Initiate Public ☐ 4c. Establish damage claims process. Safety Actions. 5. Keep Stakeholders and Public Informed of Response ☐ 1d. Consider evacuations if needed. **Activities:** ☐ 5a. Provide forum to obtain stakeholder input and ☐ 1e. Establish aircraft restrictions. concerns. ☐ 1f. Monitor air in impacted areas ☐ 5b. Provide stakeholders with details of response actions. ☐ 1g. Develop site safety plan for personnel and ensure safety ☐ 5c. Identify stakeholder concerns and issues, and address briefings are conducted. as practical. 2. Control the Source of the Release: ☐ 5d. Provide timely safety announcements. ☐ 2a. Complete emergency shutdown. ☐ 5e. Conduct regular news briefings. ☐ 5f. Conduct public meetings, as appropriate. ☐ 2b. Conduct firefighting. ☐ 2c. Initiate temporary repairs. 3. Manage a Coordinated Response Effort: ☐ 3a. Complete or confirm notifications. ☐ 3b. Establish a unified command organization and facilities (command post, etc.). ☐ 3c. Ensure mobilization and tracking of resources and account for personnel and equipment. ☐ 3d. Complete documentation. **Current and Planned Actions, Strategies and Tactics:** Time: Actions:

Section 6: Forms Page 2 of 6





Note: Refer to ICS 207 Incident Organization Chart in Section 6: Forms (Blue Tab) for full command structure.



Core Emergency Response Plan Resources Summary: Resource(s) **Time Called ETA On-Site Notes (Location/Assignment/Status) External Notifications: (Government) Time Called** Agency **Notes**



Core Emergency Response Plan **Site Safety and Hazard Control Analysis Site Control** □ No 2. Is there an On-Scene Command Post? □ No 1. Is Site Control set-up? ☐ Yes ☐ Yes If so, where? Fatalities: 3. Have all personnel been accounted for? Injuries: ☐ Yes □ No ☐ Don't Know Unaccounted: Trapped: 5. Are Decon areas setup? □ No 4. Are observers involved or rescue attempts planned? ☐ Yes Observers: ☐ Yes □ No If so, where? Rescuers: ☐ Yes ☐ No Hazard Identification, immediate signs of: (if yes, explain in remarks) 1. Electrical line(s) down or overhead? ☐ Yes 2. Unidentified liquid or solid products visible? □ No □ Yes 3. Wind direction across incident: ☐ Towards your position 4. Is a safe approach possible? ☐ Yes □ No Wind Speed: ☐ Away from your position 5. Odours or smells? ☐ Yes 6. Vapours visible? □ Yes □ No 7. Holes, ditches, fast water, cliffs, etc. nearby? 8. Fire, sparks, sources of ignition nearby? □ Yes □ No ☐ Yes □ No 9. Is local traffic a potential problem? ☐ Yes 10. Product placards, colour codes visible? □ Yes □ No □ No 12. As you approach the scene from the upwind side, do you note 11. Other Hazards? ☐ Yes □ No a change in the status of any of the above? ☐ Yes □ No 13. Remarks: Hazard Mitigation: have you determined the necessity for any of the following? 1. Entry Objectives: 2. Warning sign(s), barriers, colour codes in place? ☐ Yes □ No 3. Hazardous material being monitored? ☐ Yes □ No 3a. Sampling equipment: 3b. Sampling location(s): 3c. Sampling frequency: 3d. Peak reading: 3e. Personal exposure monitoring: 4. Protective gear / level: 4a. Gloves: 4b. Respirators 4c. Clothing: 4e. Chemical cartridge change frequency: 4d. Boots: 5. Decon 5a. Instructions: 5b. Decon equipment and materials: 6. Emergency escape route established? □ Yes □ No 7. Field responders briefed on hazards? □ Yes □ No 8. Remarks: Protective Zones: record initial control perimeters (see Figure 1)



Core Emergency Response Plan 1. Is there a Hot Zone established? □ Yes If so, Where? 2. Is there a Warm Zone established? □ Yes □ No HAZARD If so, Where? **Evacuation Route Decontamination Station** HOT ZONE Staging Area 3. Is there a Cold Zone established? WARM ZONE **Command Post** □ Yes □ No COLD ZONE If so, Where? 4. Remarks: (Include any information on evacuation WIND DIRECTION route, etc.) Figure 1 Protective Zones Include any site sketches or photos of the protective zones (if available):

ICS 202 Incident Objectives



		Core Emergency Response Plan				
Incident Name:						
Date / Time Initiated:						
Prepare	ed by:	ICS Position:				
Genera	Control Objectives for the Incident:					
1						
2						
3						
4						
5						
Weathe	er Forecast:					
Genera	l Safety Message:					
Note: Create and prioritize SMART (Specific, Measureable, Attainable, Realistic, & Time-Sensitive) objectives that address the incident issues and utilize the solutions identified on the Operations Briefing page.						



ICS 203 Organization Assignment List



				_ , ,		mergency Response P	
Incident Name				Operational Period (Date/Time)			
				From:			
ncident	Commander(s)			Operations Section			
Agency		IC	Deputy	Chief Deputy			
				Staging Area I	Manager		
				On-Site Group			
				Sı	pervisor		
S	Safety Officer				Lead		
	Assistant				Lead		
Inform	nation Officer				Lead		
	Assistant				Lead		
Li	aison Officer				Lead		
	Assistant						
				Public Safety Gro			
_				St	pervisor		
	Representatives				Lead		
Agency	Name				Lead		
					Lead		
					Lead		
					Lead		
				Branch – Division / Group			
				Branch			
				D1 1 1 (0	Deputy		
lanning	Section			Division/Group	Lead		
	Chief			Division/Group	Lead		
Deputy			Division/Group Lead				
Resources Unit			Division/Group Lead				
Situation Unit				Division/Group	Lead		
	nmental Unit			Dunnah Divinian	1000000		
Documentation Unit Demobilization Unit			Branch – Division / Group Branch Director				
recrinica	al Specialists			Division/One	Deputy		
				Division/Group	Lead		
onistics	Section			Division/Group Division/Group	Lead Lead		
Logistics Section Chief				Division/Group	Lead		
Deputy				Division/Group	Lead		
	Supply Unit						
F	acilities Unit			Finance / Admin Section			
	Support Unit				Chief		
Communications Unit		Deputy					
Medical Unit			Time Unit				
Food Unit		Procurement Unit					
			Compensation / Cla				
					Cost Unit		
	By: (Resources U			l .		Date/Time	



ICS 204 Assignment List

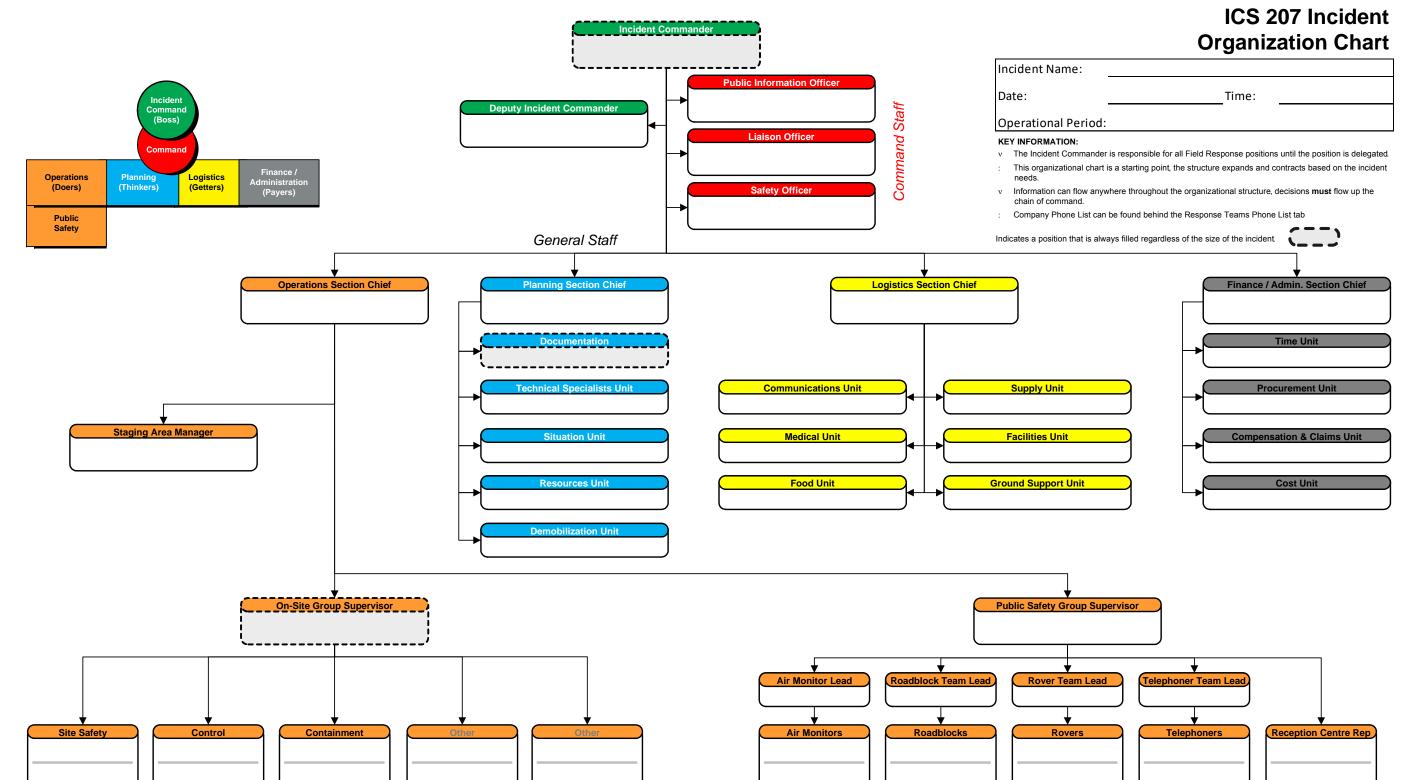


							Core Emergenc	y Respon	se Plan	
Branch:					Division / Group / Staging:					
Incident Nan				Operational Period:						
incident ivan	iic.							ne		
					To: Date Ti			ne		
Division / Gr		-								
Operations Chief					Division/Group Supervisor					
Branch Direc	ctor				Staging Area Manager					
Resources	Assigned '	to This Period								
Resour	ce	Leader	No. of		Contact		Reporting L	ocation, Sp	ecial	
Identifi	er	Leauei	Persons	Cel	ll #, radio fre	eq. Etc.	Equipment and	Supplies, F	lemarks	
Work Assign	ments:									
Special Instr	uctions:									
Division / G	roup Com	munications Summa	arv							
Function Frequencies System			Chan.	Func	tion	Frequencies	System	Chan.		
Funct		- Troquellollo	- Cy Ollom	- Onlaini	- Turic			- C, Citolii	- Chain	
Command	Local Repeat					Local Repeat				
Div. / Group										
Prepared By:				C. Suria to F			Date:	Time:		
Prepared By: (Resource Unit Leader)								Date.	Titile.	
Signature:										





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Revised June 2018





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ICS 208 Safety Message / Plan



	-	Core Emergency Response Plan
Incident Name:	Operational Per	riod:
	From: Date_	Time
	To: Date_	Time
Safety Message/Expanded Safety Message, Safety	Plan, Site Safety	/ Plan:
Site Safety Plan Required? ☐ Yes ☐ No		
Approved Site Safety Plan(s) Located At:		
Prepared By:		
(Name and Position)		Date Prepared:
, , ,		
Signature:		Time Prepared:





			Core Emerg	ency Response Plan		
Incident Name:		Location of Incident:				
Date / Time Initiated:			(LSD / NTS)			
Prepared by:		ICS Position				
Incident Details:						
Gas readings: H₂S		SO ₂	LEL	_		
Level of Emergency:						
	ert / Minor	□ Level 1 □	Level 2	☐ Level 3		
Affect Medium: (Check all that app	ly)					
☐ Air ☐ Water ☐	Soil	Other – Specify:				
Site Type: (Select only 1)	ı					
☐ Well (Active)	,	doned/Suspended)	□ Remote	Sump		
☐ Well (Drilling & Completions): Rig I						
☐ Battery/Plant/Facility	☐ Tank Farm	/Storage	☐ Pipeline			
☐ Riser (Pipeline)						
☐ Road or Road Structure	Name:		Location o	Location on Road:		
☐ Other – Specify:	`					
Incident Type: (Check all that apply ☐ Sour Gas Release	y) □ Sweet Gas	Dalagae		`nillo		
☐ Sour Gas Release			☐ Liquid S			
	☐ Fire/Explos		☐ Drilling			
☐ Worker Injury/Fatality	- ,	eft, threat, terrorism)		d Seismicity (Transportation		
☐ Well Bore Communication	☐ Pipeline Bo		□ Well Co	/Transportation		
☐ Equipment/Structural Damage ☐ Other – Specify:	□ Fipeline bit	eak	□ Well Co	orti Or		
Activity: (Check all that apply)						
☐ Construction (Road, Lease, Pipe)	☐ Drilling/Exp	loration	□ Waste I	Management		
□ Processing	□ Well Fractu		□ Servicir			
☐ Repair	☐ Flaring (Em		□ Well Te			
☐ Pressure Testing	☐ Transportat					
☐ Other – Specify:	'		1			



		Core E	mergency Response Plan							
Consequence or Impa	acts: (Check all that apply, if n	one, leave blank)								
☐ Worker Safety (Injuri	es, Fatalities)									
☐ Economic (Loss of a	nd/or damage to equipment or in	nfrastructure, loss of produ	ction, work stoppage)							
☐ Other – Specify:										
Material Information:										
Is spill off lease?	☐ Yes - Estimated spill quantit	y:	□ No							
☐ Liquid Hydrogen (Cru	ude, Oil, Diesel, Fuel)	☐ Toxic Gas Liquid (>1	% Different Toxins)							
☐ Acid	☐ Emulsion (Oil, Gas, Water)	☐ Sweet Natural Gas ☐ Salt Water								
☐ Methanol	☐ Non-Toxic Liquids	☐ Fresh Water								
☐ Sour Natural Gas	☐ Sour Liquids (<1% H ₂ S)	☐ Other – Specify:								
□ Non-Toxic Gases (Nitrogen, Carbon Dioxide, Inert Gases)										
Area Information:	Area Information:									
Land Type: ☐ Priva	ate Land Crown Land	Field Name:								
Area Type: ☐ Fore	est □ Muskeg □ Far	mland □ Residential	☐ Other							
Access: □ Helio	copter □ ATV □ 4W	D 🗆 2WD	□ Unknown							
Name of road the asset	t is located on:									
KM where the incident	occurred:									
Distance to nearest res	idence/public facility:									
Nearest City/Town/Ope	en Camp:									
Weather Conditions:										
Weather Conditions	☐ Clear ☐ Cloudy	☐ Other:								
Wind Direction	N NE NW E	SE S SW	W							
Wind Strength	☐ Calm ☐ Moderate	☐ Strong ☐ Gusty	/							
Temperature	°C									
Public / Worker Injurie	es / Medical Emergencies:									
☐ First Aid ☐ Hosp	italization	□ Other – Specify:								
, ,	Il agencies as required)									
☐ 911 (Police/RCMP, Fire, EMS)		□ Local Authority (MD, County, Town, City)	☐ Health Authority							
☐ National Energy	☐ Occupational Health	☐ Emergency	☐ Ministry of							
Board (NEB)		Management Agency	Transportation							
☐ Workers' Compensation Board (WCB)	I Assistance Canada I	☐ Western Canadian Spill Services (WCSS)	□ CANUTEC							
☐ Transportation Dangerous Goods (TDG)	□ Other	□ Other	□ Other							
□ Other	□ Other	□ Other	□ Other							
	y Alberta Environment & Parks (Forest of Fisheries and Oceans as required.	ry/Fish/Wildlife/Lands), Environr	nent & Climate Change Canada							

Refer to the Government Notification Matrix and External Agencies Contact List or Area Specific Information for complete list of agencies requiring contact.



				Core Emergency Response Plan				
Agency Notification)							
Agency Nar		Contact Nan	ne	Contact Number	Notified (Y/N)			
					(1/14)			
Collect all compl	leted C3 Gov	ernment Agency Conta	ct Logs fror	n responders for full document	ation.			
Notes:								
Roadblock Location	ns:							
Roadblock Number		Name		Location/LSD				
		Name		Location/LSD				
		Name		Location/LSD				
		Name		Location/LSD				
		Name		Location/LSD				
		Name		Location/LSD				
		Name		Location/LSD				
		Name		Location/LSD				
Number								
Number Collect all			rom respoi	Location/LSD).			
Number			rom respon		1.			
Number Collect all			rom respon		1.			
Number Collect all			rom respon).			
Number Collect all			rom respon).			
Number Collect all			rom respo).			
Number Collect all			rom respon).			



Core Emergency Response Plan Air Monitor Locations: Air Monitor Location/LSD Name Number Collect all completed A5 Air Monitoring Logs from responders for full documentation. Notes: **Reception Centres Phone Number** Name Location Collect all completed B1 Reception Centre Registration Logs from responders for full documentation. Notes:

ICS 211 Check-In / Out List



					Core	Emergency	Response Plan					
Incident Name:												
Date / Time Initiated:												
Prepared by:				ICS Position:								
Check-in Location		Staging Area] ICS Res. Unit	Other:	Other:						
Name of Company	Date of Check-in	Supervisor Name	Total # of Personnel	Incident Assignment	Assigned	Available	Date of Check-out					
Notes:												



ICS 214 Activity Log



				Core Emergency Response Plan
Incident Name	e:			
Date / Time Ir	nitiated:			
Prepared by:			Position / Title:	
Personnel As	ssigned			
	Name	ICS Pos	sition	Location
Activity Log				
Time			Actions	



ICS 215 Operational Planning Worksheet



												Core En	nergency	Respons	se Plan
Incid	ent Nan	ne:			Op	erational	Period:								
					То	: Date		 Time		 To: [ate		_ Time		-
Branch	Division, Group, or Other	Work Assignments & Special Instructions	Resources									Overhead Position(s)	Special Equipment & Supplies	Reporting Location	Requested Arrival Time
			Req.												
			Have												
			Need	 	 										
			Req.						- -						
			Have		- - -			 	: : :						
			Need		 				<u>.</u>						
			Req.												
			Have	 	 										
			Need		 										
			Req.		: :				: :						
			Have	 					:	 					
			Need		 										
			Req.		- -										
			Have		 - -				: : :						
			Need												
			Req.		- - 										
			Have												
			Need												
			Req.		 -										
			Have						: : :						
			Need												
		Total Resources Requir	ed:										Prepared b	y:	
		Total Resources - Have Hand:	on										Position/Tit Date/Time:		
		Total Resources Need t Order:	0										Signature:		



ICS 215a Incident Action Plan Safety Analysis



							1			Core Emergency Response Plan
Incident Name:							Date / T	ime Initia	ated:	
Prepared by:							ICS Pos	sition:		
Division or Group	Potenti	ial Hazar	ds							Controls (e.g., PPE, buddy system, escape routes)
	Type of Hazard									



ICS 221 Demobilization Checkout



									Core Emerge	ncy Response Plan
Incide	nt Name / N	lumber:					Date / Time:		Demob. Number:	
Unit/P	ersonnel Re	eleased:					1			
Transp	oortation Ty	pe / Number:								
Actual	Release Da	ate / Time:							Manifest Completed?	□ Yes □ No
Destin	ation:			Notify:	□HQ	☐ Agency	☐ Region	☐ Area		Dispatch
				Name:						
				Date:						
Unit L	eader resp	onsible for mance rating								
						Unit / Perso	nnel			
You ar	nd your reso	ources have beer	released	subject to Sigi	n-Off from the foll	owing:				
Demol	bilization Ur	nit Leader – Chec	k the appr	opriate box						
Logist	tics Section	n								
☐ Sup	ply Unit									
☐ Con	nmunicatior	ns Unit								
□ Fac	ilities Unit									
☐ Gro	und Suppor	rt Unit Leader								
Planni	ing Sectior	1								
□ Den	nobilization	Unit								
Financ	ce/Admin S	Section								
□ Tim	e Unit									
Other										
Remar	rks:									
			Prepare	d By:				Signature:		
Page		of	(Name a	and Position)				-		



ICS 230 Meeting Schedule



				Core Eme	rgency Response Plan
Incident Name	:		Operational P	Period:	
			From: Date		Time
Meeting Sche	dule (Commonly-held	meetings are inc			
				Attendore	Lagation
Date / Time	Meeting Name	Purpo	ose	Attendees	Location
Drenared by: /	Situation Unit Leader)			Date / Time:	
i iepaieu by. (onuation offit Leader)			Date / Tillle.	



ICS 231 Meeting Summary



	Core Emergency Response Plan
Incident Name:	Meeting Date / Time:
Meeting Name:	
Meeting Location:	
Meeting Facilitator:	
Attendees:	
Notes: (with summary of decisions and action items)	
Prepared by:	Date / Time:



ICS 233 Incident Open Action Tracker



	Incident Name:										
No.	Item	For	Status	Start Date	Briefed	Target Date	Actual Date				
1											
2											
3											
4											
5											
6											
7											
8											
9											
10											
11											
12											
13											
14											
15											
16											
17											
18											
19											
20											

ICS 233 Incident Open Action Tracker



Core Emergency Response Plan Start Date Briefed Target Date **Actual Date** For Status No. Item

A1 Initial Emergency Report Form



Core Emergency Response Plan

First On-Scene Actions

Evacuate		area immediately.	of you.									
		ind if a release is upwin	d from you.									
	☐ Move to higher ☐ Call for help (er ground if possible. "Man Down")										
Alarm	. ,	orn or whistle, or call by	radio.									
Assess		,										
Protect	☐ Put on breath	☐ Put on breathing apparatus before attempting rescue.										
Rescue	☐ Remove victir	n to a safe area.										
First Aid	☐ Follow the sta	andard first aid protocols	s at worksite. (CPR, etc.)									
Medical Ai	u -	port of casualties to me										
	E Provide Illion	nation to Emergency W	edidai dei vides (Elvio).									
	etails To be completed by the	person involved or notified	Data /Time									
Report taker	by		Date / Time									
Name of per	son calling		Caller Telephone									
Incident Loca	ation											
		(LSD / NTS	3)									
Event Summ	ary											
Agencies Notified	☐ Yes Who? ☐ No											
Event Status	☐ Incident contained or c☐ Imminent control possi		☐ Intermittent control pos ☐ Incident is uncontrolled									
Site Type	□ Well □ Pipeline	☐ Tank Farm/Storage	☐ Battery/Plant/Facility	□ Other								
In aide of	☐ Sour Gas Release	☐ Sweet Gas Release	☐ Pipeline Break	☐ Security (theft, threat, terrorism)								
Incident Type	☐ Loss of Containment	☐ Fire/Explosion	☐ Worker Injury/Fatality	☐ Vehicle/Transportation								

A1 Initial Emergency Report Form



Core Emergency Response Plan

Impacts													
Public Health an	nd Sa	fety			□ Could	be jeop	ard	ized		□ Is jeopard	lized		
Public Protectio	n Me	easu	res Take	n	□ Notific	cation		Evacuatio	on l	☐ Shelter-in	-place	□ Roadbl	ocks
Worker Injuries					☐ First A	∖id		Hospitaliz	ed	□ Fatality	□ C	ther	
Distance to neare	est su	ırface	e develo	pment		k	m	Distance centre	e to ne	earest urban			km
Details								CCITIC					
Release Impact			n-Lease		Off-Lease	Produ	 ct				Amoui	nt	
Gas Readings		H ₂ S		SO ₂		LEL_		Ot	ther				
Distance to neare	est w	aterc	ourse	·		kr	n	Weather	r Cond	ditions		0° 360° N	
Details											3 N	W 15°	NE NE
											/	WNW N	ENE
											270° W ←	wsw	ESE E 90°
											/	SSW SS	SE /
											22	W 25	SE 135"
												180*	
				Τ_					Publ	ic			
Media Involvement?	□Y	'es	□ No	Invol	ılator vement?	□ Ye	S	□ No	Affai	rs/Commur tions Issue:	nity s?	☐ Yes	□ No
Details									•				
Notes / Instruc	tion	s Pr	ovided	•									
Notes / mstrue	CIOII	311	Ovided	•									

Distribute this completed report to all Key Response Personnel

Note: Ensure the First On-Scene Actions have been completed before proceeding to the Five Step Initial Response Guide.

A2 Odour Complaint Script



Date:	Prepared by:											
Time: a.m. p.m.	Duration of call:											
To help us understand your immediate needs,	, we need to know:											
Name:	Name:											
	Contact number:											
Description of the concern:	Description of the concern:											
How many people are you with right now?												
AdultsChild	dren											
Can you provide the location of the incident?												
Location of the incident (address,	Location of the incident (address, legal, landmark, etc.):											
Where are you right now?												
☐ Home / Work ☐ In a Vei	hicle											
If the resident is at home / work / o	outside tell them:											
The company will send someone to investigate. To be safe, you and anyone that you may be with need to go inside and stay inside. Close all doors and windows and turn off any appliances that blow out indoor air (i.e. clothes dryer) or suck in outside air (i.e. heating / air conditioning). Do not go outside or attempt to start any vehicles until you are told it is safe to do so.												
If the resident is in a vehicle and o	cannot shelter-in-place tell them:											
The company will send someone to investigate. To be safe, you and anyone that may be with you need to get inside the vehicle and stay inside. Keep all doors and windows closed and shut off the air conditioning / heat. If you see or hear anything that might indicate where the incident is occurring, travel in the opposite direction of the hazard; otherwise, continue travelling on your current course which will likely take you out of the hazard area.												
Someone will call you back with further instruction so please stay off of the phone so that we can contact you. If you have any urgent questions please call the company at												



A3 First Call Communication



	Regulatory Contact				Field	Field Centre						
	Caller								Phone			
10	Notification	Date		Time	Sta ease	Start Time			☐ Ongoing			
Contact Details	Licensee				'				Phone			
ontact	Location				Nea	rest Town		•				
ŭ	Nearest Resident		Dista	nce/Direction					Phone			
	Media Involvement?	•	□ Lo	ocal [egional [☐ Natio	nal ational	Media (Contact				
	Operator								Phone			
	Public Health and Safety	I		l be jeopardized pardized		Worker In	njuries	_	rst Aid ospitalization	☐ Fatality		
Impaci	Emergency Assessi Matrix completed wi licensee		_	_	Two Three	ERP Activa	ated?		te Specific eld/Area	☐ Corporate		
Public Impact	EPZ Size (2 km if unk	known)	Nui	mbers and Types	of Public	in EPZ		EOC	/ICP Location			
	Public Protection Mea Implemented	asures		Notification Shelter		☐ Roadb ☐ Evacua		Numl	ber Evacuated			
	Release Impact	☐ On lea	ase	☐ Off lease)	H₂S Conc	entration					
,pe	☐ Sensitive Environr				Environment Affected				nding Water ving Water	Water Body Name		
Release Type	Area Affected (m³)	☐ Proper	rty Da	mage 🔲 🛭	nt Loss				ed			
Rele	Gas Release	☐ Sweet		Sour				ume/Rate				
	Liquid Release	Oil		☐ Water	luent	\	/olume/	Rate				
	Release Point Dete	ermined										
nt	Third Party / Outside Required	e Assistan	ce	☐ Incident co☐ Intermitten					ninent control dent is uncont			
Containment	Company					WCSS C	Со-ор					
e Oe	Well Licence No.			Type of Incident		Kick	□Blo	wout	Loss	of Circulation		
Operations Type	Well Status	☐ Drilling ☐ Standi		☐ Servicing☐ Sweet		Producing Sour	☐ Inje		☐ Suspe	nded		
ratio	Pipeline License No.			Line No.		Hit	Lea	ak	Ruptu	re		
Ope	Production Facility Lie	cense No.		☐ Gas	_	Gas Plant Battery	☐ Cor	mpress	or AENV Ap	proval No.		
				1		,		•				

A3 First Call Communication



0	License Air Monito	oring Occurring		Mobile	☐ Handheld	Estimated Time of Arrival					
Air Monitoring	Initial Readings / Loc	ation	□РРВ		☐ On Site	Distance					
inc			☐ PPM ☐ Off Site								
ir Mc	Contractor Name		Pho	one		AMU Phone					
∢	Wind Direction			Speed Meteorological Conditions			ons AER AMU ETA				
	Communications com	npleted by Licens	see a	nd /or Regula	atory Agency		•				
	☐ RCMP/Police	☐ Energy Regulator		☐ Emerger Agency	ncy Management	□TDG	☐ OH&S	☐ WCB			
ટા	☐ Ambulance	☐ Local Author	ity	☐ Ministry	of Transportation	☐ CANUTEC	☐ DFO	□ wcss			
Communications	Fire	☐ Health Autho	rity	☐ Environn Canada (EC	ment & Climate Change CCC)	☐ ERAC	Other	Other			
ınic	☐ NEB	☐ First Nations		☐ Indian O	il & Gas	Other	Other	Other			
m u	Contact Names & Phone Numbers										
Cor											
	Incident Cause	☐ Natural		☐ Humai	n-Induced unintentional	l					
	☐ First Nations Band	Band / Settle	emen	nt Name / Contact			Phone				
	☐ Metis Settlement										
	Complaints	☐ Local									
ion		☐ Large are	ea								
Other Information	Private Land Title hol	der				Phor	e				
Info	Additional Information	1				<u> </u>					
Jer											
=											

A4 Incident Action Plan Checklist



IAP Checklist Items:	Comments:
☐ ICS 202 – Incident Objectives	
☐ ICS 207 – Incident Organizational Chart	
☐ ICS 209 – Incident Status Summary	
☐ ICS 215 – Operational Planning Worksheet	
☐ ICS 215A – IAP Safety Analysis	
☐ ICS 230 – Meeting Schedule	
☐ ICS 233 – Incident Open Action Tracker	
□ Map:	
□ Map:	
□ Other:	
□ Other:	
□ Other:	
Notes:	

A4 Incident Action Plan Checklist



A5 Air Monitoring Log



Date:		Responder Name:	
Page _	of	Responder Position:	

		H₂S	LEL	O ₂	SO ₂		Temp	Wind C	onditions *	
Time	Location of Samples	(ppm)	(%)	(%)	(ppm)	Other	Other (°C)		Speed (km/hr)	Comments

^{*}Estimate meteorological conditions where accurate readings are not available.



				ше	LEL	O ₂	SO ₂		Temp	Wind C	onditions *	
Time	Location of Samples	H₂S (ppm)	(%)	(%)	(ppm)	Other	(°C)	From	Speed (km/hr)	Comments		

^{*}Estimate meteorological conditions where accurate readings are not available.

A6 Threatening Call / Bomb Threat



1									Core Eme	rgency	Response Plan	
Date:				Time Call Reco	eived:	ved: Time Call Reported:						
Perso	n Receiving Call:				Wł	What/Whom Call Directed To:						
Caller	's Sex:		Female	Unknowr	1 Ар	proximate	Age	:				
Accer	nt: Yes N	o T <u>ı</u>	уре:	Familiar voice:		′es 🗌	No	Wh	0:			
Threat (Exact Wording):												
Tips:												
If bor	nb threat, ask the f	ollov	wing que	estions:								
	will the bomb go of and time)	f?										
Wher	e is it located?											
Why o	did you place it?											
What	kind of bomb is it?											
What	does it look like?											
What	is your name?											
Where	e are you calling from	m?										
Was t	he caller familiar wit	h co	mpany fa	cilities, or empl	oyees'	? (e.g.: nic	cknan	nes,	, familiarity with	staff, etc	:.) Yes No	
Did ca	aller appear familiar	with	building /	facility by the	descrip	tion of the	e bon	nb Ic	ocation?	☐ Yes	□ No	
Ident	ifying Characterist	ics o	of Caller									
	Voice		Speecl	h	Lang	uage			Manner		Background	
	Loud		Fast		Exce	llent			Calm		Office Machines	
	Soft		Slow		Good	l			Angry		Factory Machines	
	High Pitched		Distinct	. 0	Fair				Rational		Street Traffic	
	Deep Raspy		Distorte Stutter	d 🔲	Poor Foul	Language			Irrational Coherent		Airplanes Trains	
	Pleasant		Nasal		Acce				Incoherent	ū	Animals	
	Intoxicated								Deliberate / Serious		Party Atmosphere	
□ □ Emotional □ Music										Music		
Notify proper authorities as soon as possible. Have employees take a look around their immediate work stations for unusual packages. Evacuate building if necessary.												
Name	of the supervisor fi	ret na	atified:									





	K	

Site Number _____
Location

Remote Site Landing Zone Reference Card

In the event of a SITE EMERGENCY
PHONE the STARS Emergency Link Centre®

TOLL FREE

OR

DIRECT

1-888-888-4567

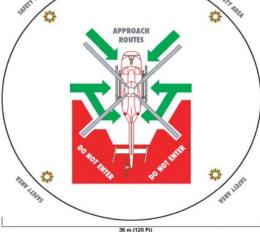
403-299-0932

BE PREPARED WITH THE FOLLOWING INFORMATION

- 1. STARS Site Number
- 2. Location of site (Legal Land Description or GPS)
- 3. Contact phone number at the site
- 4. Known hazards on-site
- 5. If applicable, is there a monitor on-site confirming the presence of H₂S

SAFETY GUIDELINES

- the landing zone should be on level ground, (less than 5% slope) at least 36 x 36 metres (120 x 120 ft) and more, if possible, to include a safety zone
- check for loose debris in landing zone THIS IS OF VITAL IMPORTANCE
- ensure no one approaches the helicopter STARS crew will approach you when safe to do so
- everyone should be at least 30 metres from landing zone during landing and takeoff, due to possibility of injury from loose debris caused by rotor downwash
- movement around aircraft is to be in safe areas only



WIND DIRECTION

STARS LANDING ZONE

• if necessary, provide road blocks approximately 500 metres on either side of the landing zone

PRE-LANDING CHECKLIST

The STARS Emergency Link Centre will require the following information from the site:

TERRAIN

level or sloping type of surface dust, loose snow, rocks, bushes, stumps, etc.

LANDING ZONE MARKINGS

4 turbo flares
4 road flares / strobes
4 reflective flares
4 highway cones (days only)
extra strobes/flares/cones
on upwind side

HAZARDS

signs vehicles trees equipment wires



B1 Reception Centre Registration Log



Core Emergency Response Plan

Due to travel and time constraints, the company may not always be able to have a company employee at the Reception Centre before evacuees begin arriving. In this case this cover page can be included with the forms on the next 2 pages and sent to a representative at the Reception Centre to provide them with guidance on how to register and track evacuees until a company representative arrives.

	es at the following Reception Centre:								
	our company contact is:								
Position:	Contact Number:	Fax Number:							
rovide the evacuees with food and lodging as required. ecord if any evacuees choose to leave the Reception Centre (name, contact number, where are they going, etc	:.).							
	rovide all evacuees with the statement below and any other st rovide the evacuees with food and lodging as required. ecord if any evacuees choose to leave the Reception Centre (ecord all evacuees as they arrive on the forms provided. rovide all evacuees with the statement below and any other status updates as provided by your company conta							

B1 Reception Centre Registration Log



			Core Emergency Response Plar
Date:		Responder Name:	
	•		B
Page	of	Responder Position:	Responders Phone No.:

Resident	Name (list all names in party)		# Of	Number	Arrival	Depart	Destination	
ID	First	Last	Occupants	arrived	time	Depart time	phone # (where they can be reached)	Comments

B2 Resident Compensation Log



-	10010011	Compone	Jacioii I	-09						, and a second
			<u> </u>				1			Core Emergency Response Plar
Resident's Name:		Home A	Address:			Home T	elephone #	# :	Location of Land (LSD):	
						Busines	s Telephor	ne #:		
Num	ber of Reside	nts Evacuated:	Evacua	ited to:			Telepho	one # While	Evacuated:	
			1				1			1
No.	Date	Location	Trans.	Accom.	Meals	Phone	Sundry	Total	D	etails of Expense
	Total Rep	orted Expenses								
Annro	ved Bv:	L				Г)ate:	·	!	

Section 6: Forms

B2 Resident Compensation Log



Core Emergency Response Plan

Resid	dent's Name:		Home A	Address:			Home T	elephone #	# :	Location of Land (LSD):
							Busines	s Telephor	ne #:	
Numl	per of Resider	nts Evacuated:	Evacua	ted to:			Telephone # While Evacuated:		Evacuated:	
No.	Date	Location	Trans.	Accom.	Meals	Phone	Sundry	Total	De	etails of Expense
	Total Repo	orted Expenses								
Approv	/ed By:					D	ate:			

Section 6: Forms Page 2 of 2



			Core Emergency Response Plan
Date:		Responder Name:	
	•	D	
Page	Of	Responder Position:	Responders Phone No.:

-	Builting and	B	01.1475	Number	of people	Assistance or	•
Time	Resident name	Resident ID	Shelter / Evacuate	Inside	Outside	transportation required?	Comments
			O Shelter O Evacuate			O Yes O No	
			ShelterEvacuate			O Yes O No	
			ShelterEvacuate			O Yes O No	
			O Shelter O Evacuate			O Yes O No	
			ShelterEvacuate			O Yes O No	
			ShelterEvacuate			O Yes O No	
			ShelterEvacuate			O Yes O No	
			ShelterEvacuate			O Yes O No	
			ShelterEvacuate			O Yes O No	
			ShelterEvacuate			O Yes O No	
			ShelterEvacuate			O Yes O No	
			ShelterEvacuate			O Yes O No	

Time Residen	name Resident ID	Shelter / Evacuate	Number of people	Assistance or	Comments
--------------	------------------	--------------------	------------------	---------------	----------

Section 6: Forms Page 1 of 2



				Core Emergency Response Plan
	Inside	Outside	transportation required?	
O Shelter O Evacuate			O Yes O No	
O Shelter O Evacuate			O Yes O No	
O Shelter O Evacuate			O Yes O No	
O Shelter O Evacuate			O Yes O No	
O Shelter O Evacuate			O Yes O No	
O Shelter O Evacuate			O Yes O No	
O Shelter O Evacuate			O Yes O No	
O Shelter O Evacuate			O Yes O No	
O Shelter O Evacuate			O Yes O No	
O Shelter O Evacuate			O Yes O No	
O Shelter O Evacuate			O Yes O No	
O Shelter O Evacuate			O Yes O No	
O Shelter O Evacuate			O Yes O No	
ShelterEvacuate			O Yes O No	



			Core Emergency Response Plan
Date:		Responder Name:	
	•	D	
Page	Of	Responder Position:	Responders Phone No.:

-	Builting and	B	01.1475	Number	of people	Assistance or	•
Time	Resident name	Resident ID	Shelter / Evacuate	Inside	Outside	transportation required?	Comments
			O Shelter O Evacuate			O Yes O No	
			ShelterEvacuate			O Yes O No	
			ShelterEvacuate			O Yes O No	
			O Shelter O Evacuate			O Yes O No	
			ShelterEvacuate			O Yes O No	
			ShelterEvacuate			O Yes O No	
			ShelterEvacuate			O Yes O No	
			ShelterEvacuate			O Yes O No	
			ShelterEvacuate			O Yes O No	
			ShelterEvacuate			O Yes O No	
			ShelterEvacuate			O Yes O No	
			ShelterEvacuate			O Yes O No	

Time Residen	name Resident ID	Shelter / Evacuate	Number of people	Assistance or	Comments
--------------	------------------	--------------------	------------------	---------------	----------

Section 6: Forms Page 1 of 2



				Core Emergency Response Plan
	Inside	Outside	transportation required?	
O Shelter O Evacuate			O Yes O No	
O Shelter O Evacuate			O Yes O No	
O Shelter O Evacuate			O Yes O No	
O Shelter O Evacuate			O Yes O No	
O Shelter O Evacuate			O Yes O No	
O Shelter O Evacuate			O Yes O No	
O Shelter O Evacuate			O Yes O No	
O Shelter O Evacuate			O Yes O No	
O Shelter O Evacuate			O Yes O No	
O Shelter O Evacuate			O Yes O No	
O Shelter O Evacuate			O Yes O No	
O Shelter O Evacuate			O Yes O No	
O Shelter O Evacuate			O Yes O No	
ShelterEvacuate			O Yes O No	

B4 Roadblock Log



			Core Emergency Response Plan
Date:		Responder Name:	
_			
Page	of	Responder Position:	Responders Phone No.:
raye	Ol	Responder Fosition.	Responders i none No

Only emergency responders should be allowed to enter the Emergency Planning Zone (EPZ).

Vehicle Type	License plate # and province / state	Name of driver (if available)	# of people in vehicle	Time entering Zone	Time Exiting Zone	Comments (record all vehicles turned away)



Vehicle type	License plate # and province / state	Name of driver (if available)	# of people in vehicle	Time entering zone	Time Exiting zone	Comments (record all vehicles turned away)



Core Emergency Response Plan

DATE: _		
_		
TIMF:		

EVACUATION NOTICE

[Insert Company Name] has an emergency at its nearby location.

As a safety precaution, please leave the area in a (north / east / south / west) direction and proceed to the Reception Centre located at

[Insert Company Name] representatives will be available at the Reception Centre to address your questions or concerns.

For assistance, call [Insert Company Name] at

Thank you for your cooperation.



B6 Early Notification / Voluntary Evacuation Phone Message



Core Emergency Response Plan

Before calling, determine a safe evacuation route for the residents to travel, away from the emergency hazard area, upwind if possible, towards the reception centre.

Hello, this	s is	(your name)	calling fro	om	(company name)	
Is this the	(nam	e of residence / bus	siness)	_at	(telephone numbe	<u>r)</u> ?
(com	pany name)	is responding to a	a <i>(potential)</i> er	mergency at _	(location)	in your area.
You are in no danger at this time. All efforts are being made to resolve the problem and this phone call is only to inform you and provide you with an early notification.						
To help u	s understand a	and your immediate r	needs we need	d to know:		
How many people are at your location now?						
	Adults					
	Children					
Do you wish to leave your residence at this time?						
If Yes	Please travel	in a <u>north / east / so</u>	outh / west dir	rection to our r	eception centre locat	ed at:
If No Please standby for further contact. Please do not use your telephone for outgoing calls as this may prevent us from contacting you with updated information or when the problem has been eliminated.						
If you have urgent questions, please contact <u>(company name)</u> at <u>(telephone number)</u> .						
Thank you for your cooperation.						

(Pass on all information regarding this call to the Public Safety Group Supervisor immediately)

B6 Early Notification / Voluntary Evacuation Phone Message



Core Emergency Response Plan

B7 Shelter-In-Place Phone Message



					Core Emerge	ncy Response Plai
Hello, th	is is	(your name)	of	(compai	ny name)	
Is this th	e	(name)	residence at	(telep	hone number)	?
(cor	npany name)	_ is responding to	a (potential) emerg	gency at	(location)	_in your area.
		tremely important t s, or you are advise	hat you, and those ed to evacuate.	with you, st	tay indoors until	the potential
To help	us understand	your immediate ne	eds, we need to ki	now:		
How ma	ny people are	at your location	now?			
	Adults					
		household that yout of the area?	u cannot contact to	o inform ther	m of the situatior	and advise them
	☐ Yes ☐					
If Yes						
	We will send	someone to find the	nem as soon as po	ssible.		
Do you	have children	in school at this	time?			
	☐ Yes ☐	□ No				
If Yes	What schoo	l?				
	Children's n	names				
	the area imm	nediately. If school	nsure the safety of is in session, your er when the school	children will	be redirected to	
Do you	have the "She	elter-in-Place" ins	tructions previou	sly provide	d to you by <u>(c</u>	ompany name) ?
	☐ Yes	□ No				
If Yes	Please follow	the Shelter-in-Pla	ce instructions loca	ated inside t	he resident pam	phlet.
If No	Verbally wa	lk the resident th	rough the Shelter	-in-Place in	structions on th	ne next page.
Do you	understand w	hat I have told yo	u?			
Is there	an alternate n	number we can co	entact you at?			
	ave any urgen		se contact (comp	oany name)	at (teleph	one number) .

(Pass on all information regarding this call to the Public Safety Group Supervisor immediately)

B7 Shelter-In-Place Phone Message



Core Emergency Response Plan

Shelter-In-Place Instructions

For your safety:

- Immediately gather everyone indoors and stay there
- Close and lock all windows and outside doors
 - If convenient, tape the gaps around the exterior door frames
- Leave open all inside doors
- Extinguish indoor wood burning fires
 - If possible, close flue dampers
- Turn off appliances or equipment that either:
 - Blows out or uses indoor air, such as:
 - Bathroom and kitchen exhaust fans
 - Built-in vacuum systems
 - Clothes dryers
 - Gas fireplaces and gas stoves
 - Sucks in outside air, such as:
 - Heating, ventilation and air conditioner (HVAC) systems for apartments, commercial or public facilities
 - Fans for heat recovery ventilators or energy recovery ventilators (HRV / ERV)
- Turn down furnace thermostats to the minimum setting and turn off air conditioners
- Avoid using the telephone, except for emergencies, so that you can be contacted by company emergency response personnel
- Call the company emergency numbers you have been provided:
 - If you are experiencing symptoms or smelling odours (so that we can address your concerns and adjust our response priorities)
 - If you have contacted fire, police or ambulance (so that we can coordinate our response)
- Stay tuned to local radio and television for possible information updates
- Do not leave your residence, even if you see people outside, until you are told to do so
- After the hazardous substance has passed through the area you will receive an "all-clear" message from the company emergency response personnel. You may also receive, if required, instructions to:
 - Ventilate your building by opening all windows and doors; turning on fans and turning up thermostats. During this time the air outside may be fresher and you may choose to leave your building while ventilating.
 - Once the building is completely ventilated return all equipment to normal settings & operation.
- Do not leave your sheltered location or attempt to start any vehicle until a company representative advises you that the area is safe.

If you are unable to follow these instructions, please notify company emergency response personnel.

B8 Evacuation Phone Message



Core Emergency Response Plan

Before calling, determine a safe evacuation route for the residents to travel, away from the emergency hazard area, upwind if possible, towards the reception centre.

Hello, thi	is is	(your name)	of	of(company name)		
le thie th	Δ		residence at	(talanhana numbar)		
?	-	(Hallie)	residerice at	(telephone number)		
(Comp	pany name)	_ is responding to	a (potential) emergency at	(location) in your ar	ea.	
				your residence immediately a	nd	
travel in	a <u>north / east</u>	/south/west dire	ection to our reception centre	located at:		
		-	eeds, we need to know:			
How ma		at your location				
	Children					
	anyone in your ate away from		u cannot contact to inform the	em of the situation and advise t	them	
	☐ Yes	☑ No				
If Yes	Whom?					
	Yes Whom?					
	We will send	someone to find th	em as soon as possible.			
Do you	have children	in school at this	time?			
	☐ Yes	☑ No				
If Yes	What school	l?			_	
		ames			_	
	the area imm	ediately. If school i		 n. Buses will be directed to lead l be redirected to the reception . 		
Do you	require evacu	ation / transporta	tion assistance?			
•	☐ Yes	· ·				
If Yes			sist you. Please stay indoors a arrive to evacuate you.	and close all doors and window	v s	
If No	Provide the	resident with:				
	□ Directio	ns to safely trave	I to the reception centre			
	☐ A list of etc.)	titems to bring wi	th them to the reception ce	ntre (medications, cell phone	2,	
		of how long they	may be expected to stay at	the reception centre		
	☐ The opt	ion to bring their	house pets to the reception	centre		
	ontact <u>(com</u> Please keep yo		if you are unable to make it to so that we can contact you if			
Is there a	an alternate nu	umber we can conta	act you at?			
A compa	ıny representa	tive at the receptio temporary accomn	n centre will address any que	stions you may have and will n I everything I have told you? A		
If you ha	ave any urger	nt questions, pleas	se contact <u>(company na</u>	ame) at <u>(telephone num</u>	ber)	
Thank y	ou for your c	ooperation.	•			

(Pass on all information regarding this call to the Public Safety Group Supervisor immediately)

B8 Evacuation Phone Message



Core Emergency Response Plan

Evacuation is the primary protection measure

- The Telephone Notification Leader will assemble a team of phoners. There will be approximately 1 telephoner/6-7 residences. The OCC and the Grande Prairie Office may be used as telephoning stations.
- Individuals inside the identified EPZ with a Special Needs designation will be notified at a Level 1 Emergency and offered voluntary evacuation.
- At a Level 2 Emergency evacuation becomes mandatory and residents and businesses will be contacted by telephone or by a personal visit. Transients will be located and evacuated by Rovers.
- If the EPZ includes a portion of a subdivision or town, the whole subdivision or town must be evacuated.
- Evacuees will be given directions to take when leaving the EPZ.
- Residents and businesses will be required to provide their own transportation for evacuation, however, Company representatives (Rovers) will be dispatched to assist those residents and businesses that do not have transportation and require assistance.
- Roadblocks will be established at the perimeter of the EPZ to control the flow of traffic coming into or leaving the area.
- Contact the principals of area schools and the associated area School Bus Coordinators. Advise the school administration of road closures.
- All evacuees will be asked to proceed to the designated Reception Centre where they will be met by Ovintiv's Reception Centre Representatives who will record their arrival, answer their questions, and address their needs for food and accommodation. Once registered, evacuees may leave the Reception Centre.
- Ovintiv's Public Protection Chief will arrange communication with all evacuees on a regular basis to ensure an informed public.

C1 Preliminary Media Statement



Core Emergency Response Plan

Date:(YY/MM/DD)	Responder Name:				
Responder Position:	Responder Phone No.:				
We can confirm an incident occurred at Ovintiv's [insert	facility/site]. Our team in the field is actively				
responding and we are gathering more information about the nature and severity of the incident. An Ovintiv					
spokesperson will provide more information when it is available	able.				
You can contact our media spokesperson at (403) 645-4	1747.				
Contact:					
Off	ice:				
	ice				
F	-ax:				
Note: Only the Media Spokesperson designated by the information to the public or the media.	Incident Commander is to provide any specific				
	·				



C2 Media Contact Log



Core Emergency Response Plan

Date:		Responder Name:			
Page	of	Responder Position:	Responders Phone No.:		
If you fe	el you are not the appro	opriate person to be answering the media agencies questions	, use the following series of statements.		
		"[Insert Company Name] has an Information Officer to	o answer all media questions."		
"May I request the following information to expedite your request?" (complete the form below).					
	"Thank you. [Inser	t Company Name] appreciates your cooperation and I wil	I pass on this information to the appropriate person."		

Time	Call To	Call From	Media Outlet	Reporter / Contact Name	Telephone Numbers		Remarks / Information Required
Tille	Call 10	Call I Tolli	Media Odliet	Reporter / Contact Name	Work	Fax	Remarks / imormation Required

Document all key events, conversations, and meetings on this form. Where lengthy notes are necessary, use additional copies or the back of the page.

Section 6: Forms Page 1 of 2

C2 Media Contact Log



Core Emergency Response Plan Telephone Numbers Call From Reporter / Contact Name **Remarks / Information Required** Time Call To **Media Outlet** Work Fax

C3 Government Agency Contact Log



Core Emergency Response Plan

			<u> </u>
Date:		Responder Name:	
Page	of	Responder Position:	Responders Phone No.:
If you feel	you are not the app	ropriate person to be answering the media agencies questions,	use the following series of statements.
		"[Insert Company Name] has a Government Liaison to	answer all media questions."
	"	May I request the following information to expedite your re	•
		rt Company Name] appreciates your cooperation and I will	

T'	O-11 T-	0-11 5		Cantast Name	Telephone Numbers		Damaria / Camaranta	
Time	Call To	Call From	Agency	Contact Name	Work	Fax	Remarks / Comments	
							-	

Document all key events, conversations, and meetings on this form. Where lengthy notes are necessary, use additional copies or the back of the page.

C3 Government Agency Contact Log



Core Emergency Response Plan **Telephone Numbers** Remarks / Comments **Call From** Time Call To Agency **Contact Name** Work Fax

C4 Media Centre Site



	Core Emergency Response Plan
Location	
Address:	
City / Town:	
Phone #:	
Contact	
Office #:	
Office #:	
Home #:	
Map or Directi	ions to Site
wap or birecti	ons to one





Appendices

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Appendix A: ERP Scope, Training and Plan Maintenance Scope

This plan defines the emergency response process related to all hazards affecting petroleum operations. This Emergency Response Plan (ERP) outlines the process for an Alert/Minor, Level-1, Level-2, or Level-3 emergency for any jurisdiction or incident type.

Plan Objectives

The primary objective of this Emergency Response Plan (ERP) is to define the incident management system and organizational structure, process and tools to respond effectively to all incidents regardless of size or complexity. It has been designed to be intuitive and have natural process flow utilizing the Incident Command System (ICS) and to comply with applicable regulations, standards, and industry best practices.

Purpose

This ERP clearly defines emergency response team roles, functions and duties to protect people, environment, and assets during an incident. This plan clarifies the following:

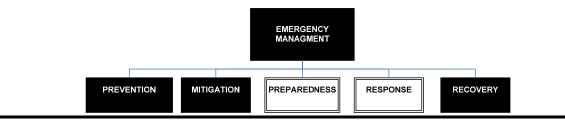
- Overall Incident Command System (ICS) response organization.
- Incident Command System (ICS) Roles and responsibilities.
- Guidance to determine the Alert or Emergency Level.
- · Mechanisms to activate the ERP.
- Notification /communication requirements to stakeholders (public /government /responders).
- Documentation tools for accurate records management of events and decisions during an event.
- Guidance for post-emergency actions.

The intent of this Emergency Response Plan (ERP) is to define effective measures in place to:

- Notify and protect the workers and the public.
- Minimize environmental impact.
- Minimize asset and property loss.
- Regain steady state of operations.
- Minimize emergency response time.
- Maximize response effectiveness.
- Coordinate with government agencies and stakeholders.
- Minimize business and reputational impact.

This manual outlines the framework, tools and reference materials to facilitate a prompt, safe, efficient and properly managed response to all incidents regardless of size or complexity. Therefore this plan provides employees and contractors with practical tools that will guide them through the Preparedness and Response principles of Emergency Management.

Emergency Management Process Flow



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Health & Safety Policy

Encana recognizes that a robust health and safety culture contributes to growing shareholder value and that strong safety performance is both a foundational value and a common goal of Encana's leadership and workforce. We believe occupational injuries and illnesses are preventable, and we strive for a workplace free of recognized hazards.—This Health & Safety Policy articulates our commitment to a safe and healthy workplace where our workforce is empowered and expected to comply with the provisions of this policy.

Encana will:

- comply with health and safety laws and regulations, requirements and industry standards applicable to our activities
- ensure all personnel working on an Encana location have the authority, responsibility and support to stop work when an unsafe situation is recognized or suspected
- identify and assess health and safety hazards arising from our activities and adopt technically sound and economically practicable measures to eliminate or mitigate the potentially negative health and safety impacts associated with such activities
- ensure that our workforce understands that working safely is a condition of employment and that all workers are responsible for their own health and safety as well as the health and safety of those around them
- expect our workforce to comply with our established health and safety practices and provide the tools and training for them to do so
- communicate to our workforce our expectations regarding health and safety performance and the necessity for adherence to these expectations
- ensure the competency of our workforce is verified and maintained in support of Encana's health and safety programs, initiatives, performance and culture
- commit to the continual improvement of our safety programs by setting health and safety
 objectives and targets, and measure and monitor our performance through regular
 inspections, audits and investigation of incidents. Use these results to develop, communicate
 and implement appropriate corrective actions geared toward lasting improvement
- commit to safe and courteous driving by complying with the Driving Safety Program
- integrate health and safety stewardship into our business planning and decision-making processes
- commit to protect the health and safety of our workforce and the public
- commit to always doing what is right when it comes to the health and safety of our workforce and the public; if it cannot be done safely it should not be done at all

Encana is committed to implementing this Health & Safety Policy by the active participation of our leadership and workforce, and through the integration of Ethos, our Operations Management System, into our day-to-day operations and decision-making processes.

Effective: December 13, 2017



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Appendix A: ERP Scope, Training and Plan Maintenance, continued

Training Requirements

Frequency / Action	As Required	Semi- Annually	Annually*	Every Three (3) Years**	Every Five (5) Years***		
Training							
Employee Orientation New / Transfer	✓						
On-the-job Training	✓						
Response Discussion During Pre-Job Meetings	✓						
Drills	✓						
Tabletop Exercise			✓ one of these				
Communication / Partial Mobilization Exercises			exercises				
Major (Full Scale) Exercise				✓	✓		
Post Incident (Actual) Review	✓						
ERP Review / Self Audit		✓					

^{*} Must be held annually.

^{**} CSA Z246.2-18, CER, OGC & AER requires Major Exercises be held every three (3) years.

^{***} Environment & Climate Change Canada (ECCC) requires Major Exercises be held every five (5) years for facilities with E2 required substances.



Appendix A: ERP Scope, Training and Plan Maintenance, continued

Plan Maintenance

Responsibility

The licensee is responsible to ensure that an ERP is created for all provincial and federally regulated oil and gas activities (i.e. sour operations, HVP pipelines, cavern storage facilities, etc.), they are maintained regularly, and any updates are disseminated to the regulatory agency and other plan holders as required. In order for this to occur the following responsibilities are designated:

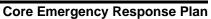
- Each individual plan holder is responsible for ensuring their assigned manuals are current, all updates are applied / downloaded / inserted, and any errors or omissions are reported to a supervisor.
- Each Area Manager is responsible for ensuring that a semi-annual review of their ERP is conducted.
 The ERP Revision Request Form is located in this section and can be used to track this information and provide documentation in the case of an ERP assessment.
- Any requests for revisions to this plan should be forwarded to the applicable Area Manager for review. These revisions will be discussed with the company's Emergency Response Program Coordinator and H₂Safety Services Inc. Any significant changes including those resulting from exercises and incidents will require immediate updates sent out to all plan holders; less significant changes will be implemented during the ERP's next annual update.
- The company's Emergency Response Program Coordinator is responsible for ensuring that the plans and distribution lists are updated, training is performed, and new projects are included in the plan. Information in this plan will be verified and updated at least once a year.
- Old manuals must be sent to H₂Safety Services Inc. or destroyed. If a plan holder no longer requires their manual (job changes, position changes, etc.), it must be returned to the company's Emergency Response Program Coordinator to be tracked, reassigned, or destroyed.

The licensee must distribute changes in information that are instrumental to implementing the ERP to all required plan holders.

Errors identified in the ERP by the regulatory agency, licensee, and other party must be corrected immediately upon identification.

Modifications to New or Existing Operations

The licensee must submit a supplement for review and approval to the regulatory agency for all newly added wells, pipelines, well / pipeline tie-ins, facilities and operating areas prior to commencement of operations if there are new surface developments within the Emergency Planning Zone. For example, the EPZ for a new pipeline tie-in does not fall entirely within the existing Emergency Planning Zone and impacts a new residence / public facility / trapper cabin / etc. that was not previously included in the Emergency Response Plan. The licensee must conduct a public involvement program for all new members of the public. Before any new or major modifications to an existing facility / pipeline are brought on-stream, any additions or changes will be added to the Emergency Response Plan. If required, a site specific Emergency Response Plan will be developed. Meetings to review response plan requirements must be held before major facility modifications are commissioned.



Appendix A: ERP Scope, Training and Plan Maintenance, continued

ERP Revision Request Form

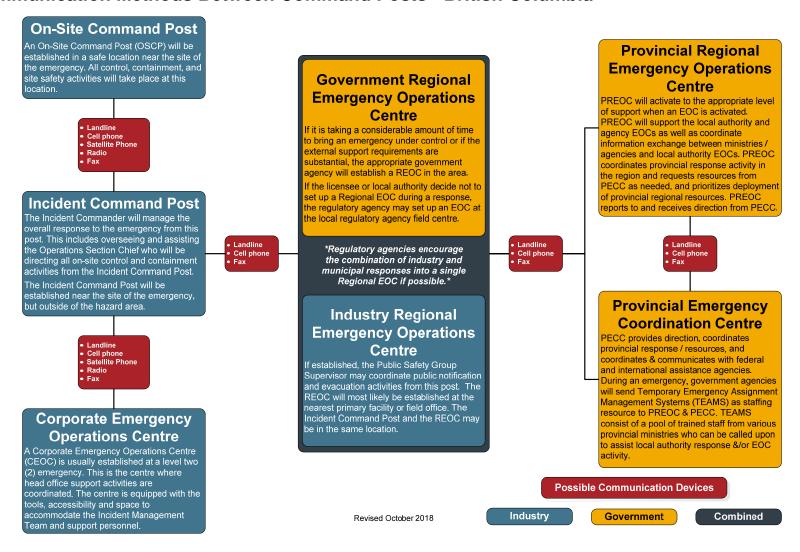
Plan Holder Name / Title / Company:
ERP Name:
Manual Number:
If any of the following items have changed, please check the box beside it and provide a description of the change in the space provided:
 □ Company information □ Mapping information □ Resident contact information □ Response staff information or capacity changes □ Facility additions, such as well or pipeline tie-ins □ Other
Description of the change: Please attach additional pages and/or support documentation as required.
Please return the completed checklist to:
Ovintiv Attn: Tanner Strangway – Senior Emergency Response Advisor 500 Centre Street SE (Box 2850) Calgary, AB T2G 1A6 Email: tanner.strangway@ovintiv.com
Fax: 403-645-3400

Core Emergency Response Plan This page is intentionally left blank



Appendix B: Incident Command Post (ICP)

Communication Methods Between Command Posts - British Columbia



Appendices Page 9



Appendix B: Incident Command Post (ICP), continued ICP Activation and Setup

The Incident Command Post is activated by the Incident Commander.

The following tasks must be addressed once the ICP has been activated:

Position	Task		
Incident Commander	 Establish briefings with the Field Response Team (FRT). Ensure staffing is adequate for the task(s). Consider the time difference, if applicable, and determine how time will be communicated throughout the incident. 		
Safety Officer	 □ Ensure the room / floor / building is secure. □ Ensure a safe work area, i.e. remove clutter or cords causing slips, trips, falls, etc. 		
Information Officer	 Notify the receptionist that there is an incident. Provide details of what message should be given out to the public and media, as well as where to direct incoming calls. Ensure inbound and outbound calls received or made are centrally logged. Ensure responders have their office phones forwarded to their cell phones. 		
Logistics / IT Support	 □ Turn on all computers; ensure the relevant systems are operational and that they all have internet/email access. □ Bring up any ERP related electronic tools (ie; H₂CommandCentre) and ensure they are working and that they can all be displayed on various projectors / screens as required. □ Check that printers are connected to the computers and working. Print a test page to confirm. □ Check that the fax machine is setup and working. □ Check that any phone conferencing systems are set up and working. □ Ensure that telephone lines are available and active. □ Ensure TVs are working properly and set up to local news or CNN. □ Obtain any additional equipment as required. 		
□ Ensure the room/floor/building is secure. Arrange for additional secured. □ If the location of the Incident Command Post is closed to general solist of staff needing access clearance to the meeting area. □ The following supplies should be available: notepaper, pens, printer and paper, documentation forms, dry erase markers, staplers and power bars and extension cords, etc. □ Arrange for refreshments (coffee, food, water, etc.) for those working well as sleeping space if required. □ Ensure there are sufficient tables and chairs for the team.			



Appendix B: Incident Command Post (ICP), continued ICP Activation and Setup, continued

Position	Task					
	☐ Determine which emergency response plans and other ERP tools are needed and pull them out to be readily accessible.					
	☐ Determine what laminated maps and charts are going to be utilized and put them up on the wall with dry erase markers. Set up the white boards and roles chart.					
	☐ Ensure clocks are displaying the correct time, including any clocks with a different time zone.					
	☐ As each person arrives: provide them with a vest, provide them with a print out of the Initial Emergency Report Form, ensure they synchronize their watches and ensure they check in with their assigned supervisor.					
Planning /	☐ As team members arrive, write their name in the appropriate position on the Field					
Documentation	Response Team Assignment Chart.					
	☐ Pass out documentation forms and provide an overview of the documentation process.					
	☐ Ensure the latest contact list for Field Response Team members are available.					
	☐ Begin documenting all actions, decisions and major events. Start-up H₂CommandCentre if available.					
	☐ Continually update the laminated maps and charts as information becomes available (Field Response Team Assignment Chart, Emergency Status Board, etc.).					
	☐ Post a schedule of events, including shift changes and status updates.					

Incident Command Post Briefings

Once the ICP has been activated and team members arrive, the Incident Commander or Deputy needs to conduct an initial briefing to provide the team with the status of the situation, establish operational periods for the ICP, establish a meeting schedule for both a planning meeting and periodic briefings and outline broad goals to guide the ICP throughout the emergency.

In additional to periodic briefings for status updates, the Incident Commander also has to conduct a meeting once the approved Incident Action Plan is in place. This meeting will outline the planned objectives and tasks and will ensure that resources required for implementation of the action plan are in available or en route.

At the end of each operational period, all departing members of the Field Response Team will be debriefed and must brief their replacements.

Documentation

It is critical to ensure that all ICP documentation is compiled, properly stored and readily available after the event. Proper documentation will aid in investigations, inquiries, debriefs and support for financial claims and budgets. Everything that happens during the Response/Recovery Operations should be recorded at the ICP. The forms at the back of this manual are designed to aid in this process

Appendix C: Toxic Gases Hydrogen Sulphide (H₂S)

Background

Hydrogen sulphide (H_2S) is a flammable, colourless gas with a characteristic odour of rotten eggs that people can smell at low levels. It is also known as hydrosulphuric acid and sewer gas. H_2S occurs naturally in crude petroleum, natural gas, volcanic gases and hot springs. It can also result from bacterial breakdown of organic matter. Industrial sources include emissions from industrial paper plants; combustion of coal, fuel oil and natural gas (including gas flares); kraft paper mills; tanneries; and emissions from sewers and waste treatment facilities. Cigarette smoke is also a source of hydrogen sulphide.

H₂S is released primarily as a gas and spreads in the air. Its residence time in the atmosphere ranges from about one day to more than 40 days, depending on ambient temperature and other atmospheric variables, including humidity, sunshine and presence of other pollutants. The decreased temperatures and decreased levels of hydroxyl ions in northern regions in winter increase the residence time. When released H₂S gas is ignited, it will change into sulphur dioxide (SO₂), be carried into the atmosphere and dispersed over a larger area at lower concentrations.

Signs and Symptoms

Exposure to hydrogen sulphide may cause irritation to the eyes, nose or throat. It may also cause difficulty in breathing for some asthmatics. Brief exposures to high concentrations of hydrogen sulphide can cause a loss of consciousness and possibly death. In most cases, the person appears to regain consciousness without any other effects. However, in some individuals, there may be permanent or long-term effects such as headaches, poor attention span, poor memory and poor motor function. No health effects have been found in humans exposed to typical environmental concentrations of hydrogen sulphide (0.00011-0.00033 ppm).

Acute Exposure Effects

The effects on humans will vary depending on the duration and H₂S concentration of exposure. The health effects of acute exposure to H₂S are shown in the following table. Acute exposure reflects a range from a few seconds up to several weeks.

Hydrogen Sulphide Toxicity Table (BC Regulations)

Concentration (ppm)	Effects				
Less than 1	Most people smell "rotten eggs".				
3 – 5	Odour is strong.				
20 – 150	Nose and throat feel dry and irritated. Eyes sting, itch or water and "gas ey symptoms may occur. Prolonged exposure may cause coughing, hoarsene shortness of breath and runny nose.				
150 – 200	Sense of smell is blocked (olfactory fatigue).				
200 – 250	Major irritation of the nose, throat and lungs, along with headache, nausea, vomiting and dizziness. Prolonged exposure can cause fluid buildup in the lungs (pulmonary edema), which can be fatal.				
300 – 500	Symptoms are the same as above, but more severe. Death can occur within 1-4 hours of exposure.				
Above 500	Immediate loss of consciousness. Death is rapid, sometimes immediate.				

Adapted from Hydrogen Sulfide in Industry, WorkSafe BC February 2010



Appendix C: Toxic Gases, continued

Chronic Exposure Effects of Hydrogen Sulphide

Chronic effects from H_2S exposure is a developing area of research. Chronic exposure may inflame and irritate the upper respiratory tract.

Medical treatment for hydrogen sulphide exposure

(Please note: This information was provided by a medical source other than the Provincial Regional Health Authorities. See Hydrogen Sulphide (H₂S) Guidelines - Revised November 2000)

Guidelines for in Hospital Assessment/Treatment of Possible Hydrogen Sulphide Exposure

This is provided to assist medical staff in assessing a worker who has a possible or actual H₂S exposure.

Section I provides information on H₂S

Section II summarizes possible health effects, which should be evaluated at the time of presentation

Section III depicts a summary of possible clinical management

Section IV provides a guideline regarding return to work (RTW) considerations

I. Hydrogen sulphide

H₂S is a colourless gas. It is heavier than air and tends to flow in ditches, trenches and low-lying areas.

H₂S is clearly recognizable in small concentrations at around one part per million (ppm) by its characteristic rotten egg smell.

At concentrations of about 150 ppm in the air, or after prolonged exposure to lower concentrations, the olfactory sense is paralyzed and the presence of H_2S can no longer be detected by odour.

II. Health effects of hydrogen sulphide

 H_2S can be rapidly fatal. It acts by paralyzing the respiratory control centre in the brain and by inhibiting cellular respiration.

Hydrogen sulphide is a mucous-membrane and respiratory-tract irritant. Pulmonary edema, which may be immediate or delayed, can occur after exposure to high concentrations.

Acute exposure may include the following symptoms and signs:

Central Nervous System

CNS injury is immediate and significant after exposure to hydrogen sulphide. At high concentrations, only a few breaths can lead to loss of consciousness, coma, respiratory paralysis, seizures, and death. CNS stimulation may precede CNS depression. Stimulation manifests as excitation, rapid breathing, and headache; depression manifests as impaired gait, dizziness, and coma, possibly progressing to respiratory paralysis and death. In addition, decreased ability to smell occurs at 100 to 150 ppm.

Respiratory

Inhaled Hydrogen sulphide initially affects the nose and throat. Low concentrations (50 ppm) can rapidly produce irritation of the nose, throat, and lower respiratory tract. Pulmonary manifestations include cough, shortness of breath, and bronchial or lung hemorrhage. Higher concentrations can provoke bronchitis and cause accumulation of fluid in the lungs, which may be immediate or delayed for 24 hours or more. Lack of oxygen may result in cyanosis.



Appendix C: Toxic Gases, continued

Medical Treatment for Hydrogen Sulphide Exposure, continued

Cardiovascular

High dose exposure may cause insufficient cardiac output, irregular heartbeat and conduction abnormalities.

Renal

Although very unlikely, transit renal effect may include blood, casts, and protein in the urine. Renal failure as a direct result of hydrogen sulphide toxicity has not been described, although it may occur secondary to cardiovascular compromise.

Gastrointestinal

Symptoms may include nausea and vomiting.

Dermal

Prolonged or massive exposure may cause burning, itching, redness and painful inflammation of the skin.

Ocular

Eye irritation may result in inflammation (i.e. kerato-conjunctivitis) and clouding of the eye surface. Symptoms include blurred vision, sensitivity to light, and spasmodic blinking or involuntary closing of the eyelid.

Potential Sequelae

Inflammation of the bronchi can be a late development. Survivors of severe exposure may suffer psychic disturbances and permanent damage to the brain and heart.

III. Approach to the worker with suspected hydrogen sulphide exposure

Although this document refers only to H_2S , it is important for the clinician to keep in mind the possibility of co-exposure to numerous other agents. Sulphur dioxide may have been present if there has been combustion of hydrogen sulphide. Sulphur dioxide does not cause loss of consciousness but is a respiratory tract irritant. Therefore, the management of sulphur dioxide intoxication is similar to that for hydrogen sulphide. Other agents capable of causing asphyxia include carbon monoxide (toxic asphyxia) as well as a wide array of gases that act as simple asphyxiants (carbon dioxide, methane, nitrogen, etc.) by displacing oxygen. Finally, other conditions (MI, syncope, seizure, etc.) that may cause sudden collapse must be investigated and managed as appropriate.

History

The history is the key to the diagnosis of hydrogen sulphide (or other industrial) intoxication. There are two facets to the history in such cases:

Exposure history: This attempts to define, in qualitative terms, the likelihood of, and amount of exposure to hydrogen sulphide. This should include questions about work processes, the presence of a rotten egg odour and inquiring as to effects in co-workers. If possible, this should be supplemented by Industrial Hygiene information, which might include the triggering of alarms for hydrogen sulphide and historical data on air measurements. For suspected exposures, the workplace can often provide useful estimates regarding the level of exposure, although such data may require several days to reconstruct.

Clinical history: The physician should attempt to establish the presence of as many of the symptoms as possible associated with H_2S exposure. Determining the presence of respiratory tract irritation (conjunctivitis, rhinitis, tracheitis) is of particular importance since this symptom distinguishes hydrogen sulphide from several other asphyxiants and serious toxicity is unlikely in the absence of this symptom at presentation.

Investigations

There are no specific tests in routine clinical use to establish hydrogen sulphide intoxication. Rather, testing is aimed at characterizing the seguels of intoxication, as well as to rule out other causes for the presentation.



Appendix C: Toxic Gases, continued

Medical Treatment for Hydrogen Sulphide Exposure, continued

Treatment

Treatment is entirely supportive in nature and includes supplemental oxygen, managing eye and skin exposure as a chemical bum and maintenance of circulatory status. Although nitrite therapy has been advocated as an antidote, there is little evidence to support its use and as it is potentially dangerous it is not recommended.

On arrival - check blood gases and assess for lactic acidosis. Take chest film and repeat as necessary keeping in mind the delayed possibility of pulmonary edema. ECG may assist as arrhythmias and bradycardia are not uncommon. Temporary T wave depression may occur and ECG may mimic infarction.

For the unconscious patient, give oxygen using mechanical ventilation with positive end expiratory pressure.

Assess for associated musculo-skeletal and internal traumatic injury.

Maintain circulating fluid volume, but be alert for delayed onset of pulmonary edema.

At times, strong physical restraint may be required. Keep the patient as inactive as possible.

A pulmonary function test should be done near time of discharge and, if abnormal should be repeated at appropriate intervals thereafter.

If symptoms and/or exposure history are strongly clinically suggestive, because of the possibility of delayed pulmonary edema, adequate monitoring and follow-up for at least 24 hours is essential.

IV. Guidelines for Return to Work (RTW)

Three possible scenarios may be considered by the attending medical personnel:

Possible exposure, without symptoms

Possible exposure, with symptoms (that are compatible with H₂S)

Known exposure including "knockdown", with symptoms that require medical treatment and/or hospitalization.

In each scenario, a clinical decision about appropriate medical investigations, treatment, follow-up evaluation, and timing of return-to-work (RTW) will have to be made. It is emphasized that with scenarios (1) and (2), it may be preferable to either monitor the employee in the hospital or as an outpatient (with follow-up examination) for 24-48 hours prior to RTW.

Appendix C: Toxic Gases, continued Sulphur Dioxide (SO₂)

Background

Sulphur Dioxide (SO_2) belongs to the family of sulphur oxide gases (SO_2) . Sulphur is prevalent in raw materials including crude oil and coal, as well as in ore that contains common metals. Sulphur oxide gases form when fuels containing sulphur are burned and when gas is processed or metals are extracted from ore. Like other sulphur oxide gases, SO_2 dissolves in water or water vapour to form acid, and interacts with other gases and particles in the air to form sulphates and other products.

Sulphur dioxide is a colourless gas that is about 2.5 heavier than air. It has a sweet pungent odour, and can be detected by taste and smell at concentrations as low as 300 parts per billion (ppb). Acids that are formed when SO₂ (and nitrogen oxides) react with other substances in the air may be carried great distances before falling to earth as rain, fog, snow or dry particles. Acid rain damages forests and crops, changes the chemical make-up of soils, and increases the acidity of lakes and streams. Continued long-term exposure will affect the natural variety of plants and animals in an ecosystem. As well as contributing to smog, SO₂ emissions cause aesthetic damage and accelerate the decay of building materials and paints.

General guidelines dictate evacuation where SO₂ concentrations reach 5 ppm averaged over a 15 minute period. However, as a precaution, evacuation will be established under the criteria when the SO₂ level reaches 1 ppm for two to three hours, or averages 0.3 ppm over twenty-four hours.

Signs and Symptoms

Sulphur dioxide causes a wide variety of health and environmental impacts because of the way it reacts with other substances in the air. Acute and chronic exposure to SO₂ affects the respiratory system. Acute exposure effects, with increasing exposure, include irritation of the eye, nose and throat, choking, coughing, bronchitis and pneumonia. Exposure to low concentrations can aggravate chronic pulmonary diseases, such as asthma and emphysema. Co-exposure to cold or dry air may further exacerbate the respiratory effects of SO₂ on sensitive asthmatics. Particularly sensitive groups include children, the elderly and those with existing heart or lung disease.

Sulphur Dioxide Toxicity Table (BC Regulations)

Concentration (ppm)	Effects					
0.13	24 hour level (MWLAP Level B Criteria).					
0.34	One hour average evacuation level (MWLAP Level B criteria).					
2	Eight hour occupational Exposure Limit (WorkSafe BC)					
3 – 5	Odour threshold.					
5	15 minute Occupational Exposure Limit (WorkSafe BC)					
8 – 12	Throat irritation, coughing, constriction in chest, tearing and smarting of the eyes.					
5 – 15 minutes exposure produces increased irritation of eyes, nose, and the choking, coughing, and in some cases wheezing due to narrowing of the air (which increases the resistance of the air flow).						
150	Short-term endurance lost due to the severe eye irritation and because of the effects on the membranes of the nose, throat, and lungs.					
500	Highly dangerous after exposure of 30 – 60 minutes.					

Adapted from the Canada Safety Council Data Sheet "Sulphur Dioxide" No. B-4 Oil and Gas Commission November 2003.



Appendix C: Toxic Gases, continued

Medical treatment for sulphur dioxide exposure

(Please note: This information was provided by a medical source other than the Provincial Regional Health Authorities. See Sulphur Dioxide (SO₂) Guidelines - Revised July 2001)

Guidelines for in Hospital Assessment/Treatment of Possible Sulphur Dioxide Exposure

This is provided to assist medical staff in assessing a worker who has a possible or actual SO₂ exposure.

Section I provides information on SO₂

Section II summarizes possible health effects which should be evaluated at the time of presentation

Section III depicts a summary of possible clinical management

Section IV provides a guideline regarding return to work (RTW) considerations.

I. Sulphur Dioxide

SO₂ is a colourless gas with a pungent odour detectable by the human nose at concentrations of about 0.5 to 0.8 ppm.

SO₂ is highly soluble in water resulting in the formation of sulphurous acid.

Approximately 90% of inhaled SO₂ is absorbed in the upper respiratory tract.

Asthmatics and individuals with underlying bronchial hyperactivity may be more susceptible to low level exposure to SO₂.

II. Health Effects of Sulphur Dioxide

SO₂ causes almost immediate coughing with significant exposure.

SO₂ causes irritation of the conjunctive and nasal mucosa at levels between 5 and 10 ppm.

Exposures of SO₂ as low as 8 ppm has been associated with symptoms of cough, phlegm, wheezing and exertional dyspnea.

Acute high-dose exposures leading to severe injury are unusual, parenchyma lung damage occurs above 50 ppm.



Appendix C: Toxic Gases, continued

Medical treatment for sulphur dioxide exposure, continued

Acute exposure may include the following symptoms and signs:

Respiratory

Inhaled SO₂ is a moderate to strong respiratory irritant. Reddening of the throat and nose may occur. Repeated exposure to 10 ppm has caused nosebleeds. Sensitivity varies among people, short exposure to low concentrations may produce a reversible decrease in lung function, and symptoms may include chest tightness.

Exposure to high concentrations of SO_2 has caused severe airways obstruction, hypoxia and pulmonary edema. The effects of pulmonary edema include coughing and shortness of breath which can be delayed until hours or days after the exposure; these symptoms are aggravated by physical exertion. Survivors of high concentration exposures may suffer chemical bronchopneumonia and bronchiolitis obliterans, which can be fatal after a few days. Delayed chemical pneumonitis and bronchial asthma can also result.

Dermal

The gas will react with moisture on the skin and cause irritation (redness, itching).

Ocular

Eye irritation may result in smarting of the eyes and tearing. In severe cases (high concentrations in a confined area), SO₂ has caused temporary corneal burns.

Potential Sequelae

Survivors of high concentration exposures may suffer chemical bronchopneumonia and bronchiolitis obliterans, which can be fatal after a few days. Delayed chemical pneumonitis and bronchial asthma can also result.

III. Approach to the worker with suspected Sulphur Dioxide Exposure

Although this document refers only to SO₂, it is important for the clinician to keep in mind the possibility of co-exposure to numerous other agents.

History

The history is the key to the diagnosis of SO₂ (or other industrial) intoxication. There are two facets to the history in such cases:

Exposure history: This attempts to define, in qualitative terms, the likelihood of, and amount of exposure to sulphur dioxide. This should include questions about work processes, the presence of an odour and inquiring as to the effects in co-workers. If possible, this should be supplemented by industrial hygiene information which might include the triggering of alarms for sulphur dioxide and historical data on air measurements. For suspected exposures, the workplace can often provide useful estimates regarding the level of exposure, although such data may require several days to reconstruct.

Clinical history: The physician should attempt to establish the presence of as many of the symptoms as possible associated with SO₂ exposure.

Investigations

There are no specific tests in routine clinical use to establish sulphur dioxide intoxication. Rather, testing is aimed at characterizing the sequels of intoxication as well as to rule out other causes for the presentation.



Appendix C: Toxic Gases, continued

Medical treatment for sulphur dioxide exposure, continued

Treatment

Treatment is entirely supportive in nature and includes supplemental oxygen, managing eye and skin exposure as a chemical burn and maintenance of respiratory status.

On arrival - check blood gases. Take chest film and repeat as necessary keeping in mind the delayed possibility of pulmonary edema.

Oxygen should be delivered by nasal cannula or mask, or if pulmonary injury leads to severe hypoxia by mechanical ventilation.

If bronchospasm occurs, bronchodilators may be of value.

A pulmonary function test should be done near time of discharge and, if abnormal, should be repeated at appropriate intervals thereafter.

Conjunctival irritation should be treated with copious irrigation with saline and the eyes examined with fluorescein for corneal defects.

Assess for associated musculo-skeletal and internal traumatic injury.

Prophylactic antibiotics should be avoided.

If symptoms and/or exposure history are strongly clinically suggestive, because of the possibility of delayed pulmonary edema, adequate monitoring and follow-up for at least 24 hours is essential.

IV. Guidelines for Return to Work (RTW)

Three possible scenarios may be considered by the attending medical personnel:

Possible exposure, without symptoms;

Possible exposure, with symptoms (that are compatible with SO₂) or

Known exposure, including "knockdown", with symptoms that require medical treatment and/or hospitalization.

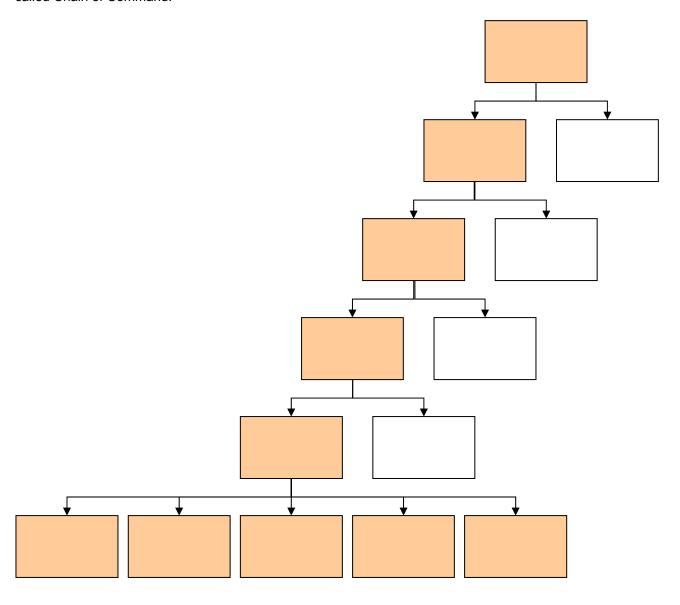
In each scenario, a clinical decision about appropriate medical investigations, treatment, follow-up evaluation and timing of return-to-work (RTW) will have to be made. It is emphasized that with scenarios (2) and (3), it may be preferable to either monitor the employee in the hospital or as an outpatient (with follow-up examination) for 24 - 48 hours prior to RTW.



Appendix D: Key Elements of the Incident Command System (ICS)

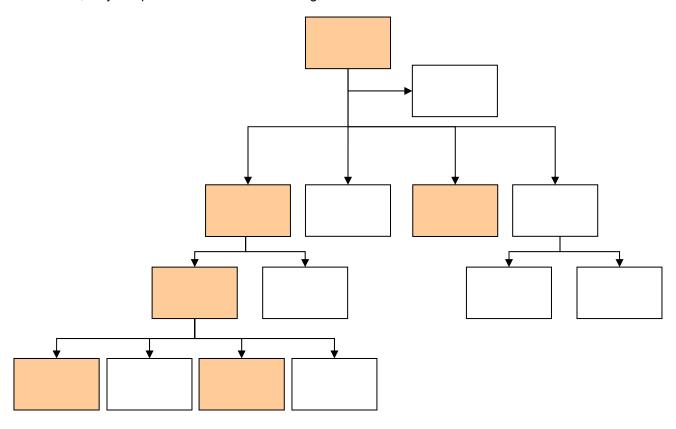
Management by Objectives – Objectives are ranked by priority, should be as specific as possible, must be attainable and if possible given a working time-frame. Objectives are accomplished by first outlining strategies (general plans of action), then determining appropriate tactics (how the strategy will be executed) for the chosen strategy

Unity and Chain of Command – Each individual takes direction from and reports to only one designated supervisor; this is called Unity of Command. Higher level personnel have authority over lower level personnel; the lower level personnel are subordinate to and take direction from higher level personnel. Orders and instructions travel down the chain of command from one supervisor to each subordinate. This is called Chain of Command.



Appendix D: Key Elements of the Incident Command System (ICS), continued

Organizational Flexibility – Only positions that are required at the time should be assigned. In most cases, very few positions will need to be assigned.



Span of Control – ICS requires that any single person's span of control (number of people reporting to them) should be between three and seven, with five being ideal.

Common Terminology – When different organizations are required to work together, the use of common terminology is essential.

Incident Action Plan (IAP) – Every incident must have a written or oral Incident Action Plan. The following information is part of an Incident Action Plan and must be communicated to the rest of the organization:

- Objectives, strategies and tactics outlined by the Incident Commander.
- Resources assignments what resources do we have and what are they doing? What resources are on order and what are they going to do?
- A description of the ICS organizational structure what positions will be filled?
- Supporting materials incident map, communications plan, evacuation plan, stick diagrams, etc.

Integrated Communications – The use of a common communications plan is essential for ensuring effective communication during an incident.



Appendix D: Key Elements of the Incident Command System (ICS), continued

Establishment and Transfer of Command – The highest ranking authority arriving onscene at an incident will assume the role of the Incident Commander. That person will continue to be the Incident Commander until there is a formal transfer of command. A transfer of command briefing usually consists of:

- Reviewing a description of the incident.
- Reviewing the actions taken thus far to contain and control the incident.
- Reviewing the current ICS organizational structure.
- A summary of the resources available and ordered.

Resources Management – A resource must either be in assigned, available, or out-of-service status.

- Assigned a resource in assigned status is currently doing whatever tasks have been assigned to it.
- Available a resource in available status is ready to be deployed at a moments notice. Resources in available status often wait for assignments at an incident Staging Area.
- Out-of-Service a resources in out-of-service status might be sleeping, receiving medical aid, getting
 repairs, etc. and is not ready for assignment.

Summary of Responsibilities

These management functions are handled by the General Staff once they have been delegated by the Incident Commander.

Command Ensures safety. Assumes overall responsibility for the incident.

The Incident Commander is responsible for the Command of the incident as well as the following management functions until they are assigned to other response personnel:

Operations Implements the Incident Action Plan (IAP) focusing on control, containment, and site

safety.

Public Safety Implements the Incident Action Plan (IAP) focusing on notification and evacuation of

the public.

Planning Help create and track (document) the success of the Incident Action Plan (IAP).

Logistics Secure the resources and put them in place to allow Operations to implement the

Incident Action Plan.

Finance/Admin Ensures procedures are in place to allow logistics to secure the resources (spending)

and track and control the expenditures.

Communications Disseminates information and liaises with external agencies.

Communications is handled by the Information Officer once one has been appointed by the Incident Commander. The Information Officer is part of the Command Staff.

Appendix E: Land Descriptions

Dominion Land Survey (DLS) System

- Each township (6 mile x 6 mile) is divided into 36 sections (1 mile x 1 mile)
- Each section is divided into 16 legal sub-divisions (L.S.D.)
- Each section is divided into four quarters (N.W., N.E., S.W., and S.E.)

The numbering of sections and L.S.D.s is shown below:

	•		Rang	е —		Secti	on			
†	31	32	33	34	35	36	13 N	14 w	15	16 IF
1	30	29	28	27	26	25	12	11	10	9
o w n	19	20	21	22	23	24	5	6	7	8 F
s h i	18	17	16	15	14	13	4	3	2	1
p	7	8	9	10	11	12	1			
	6	5	4	3	2	1				

- Townships increase in number from South to North starting at the Canada USA border
- Ranges increase in number from East to West within a Meridian. A Range is one (1) Township wide (6 miles).
- Meridians run from the North Pole to the South Pole and are spaced every four degrees. The principal Meridian in Canada originates in Central Manitoba and increases West or East from there.
- Legal land description is listed in the following order:

	L.S.D		Section	_	Township	_	Range	Meridian	
Example	02	-	01	-	38	-	09	West of the 4 th	

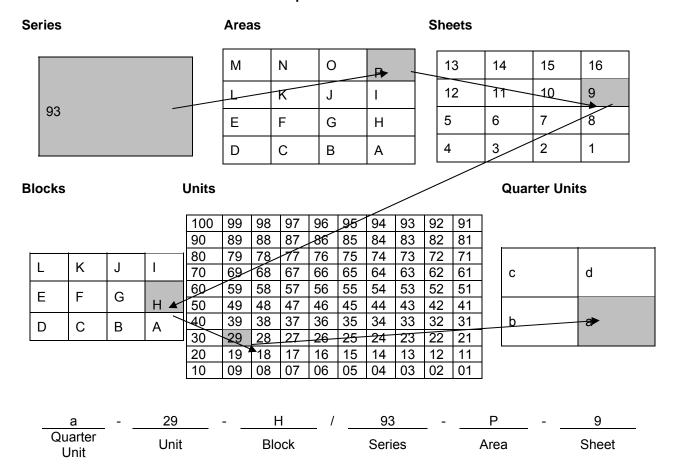
Appendix E: Land Descriptions, continued National Topographic System (NTS)

Based on the National Topographic System (NTS), the map labelling terms are as follows:

1) Series	A rectangular area that has a width of 8 degrees of longitude and 4 degrees of latitude. There are 9 Series in British Columbia (82, 83, 92, 93, 94, 102, 103, 104, and 114).
2) Area	1/16 of a map Series that has a width of 2 degrees of longitude by 1 degree of latitude (labelled from A to P).
3) Sheet	1/16 of map Area that has a width of 30' in longitude and 15' of latitude (labelled from 1 to 16).
4) Block	1/12 of a map Sheet with a width of 7'30" in longitude and 5' in latitude (labelled from A to L).
5) Unit	1/100 of a map Block, and has a latitudinal extent of 30" and longitudinal extent of 45" (labelled from 1 to 100).
6) Quarter Unit	1/4 of a map Unit (labelled from a to d).

Note: 1 degree is equivalent to approximately 111 km in British Columbia. Degrees vary in size around the planet. They become smaller the closer they get to the poles (north or south) and very large as they reach the equator.

Example a-29-H / 93-P-9





Appendix F: ERP Reference Material Acronyms

Acronym	Meaning	Acronym	Meaning
BLEVE	Boiling Liquid Expanding Vapour Explosion	MD	Municipal District
CANUTEC	Canadian Transport Emergency Centre	MEP	Municipal Emergency Plan
CAPP	Canadian Association of Petroleum Producers	MER	Ministry of Energy and Resources
CEPA	Canadian Environmental Protection Act	MOP	Maximum Operating Pressure
CERC	Corporate Emergency Response Centre	NGL	Natural Gas Liquids
CISD	Critical Incident Stress Debriefing	NOTAM	Notice to Airmen
CPE	Communications and Public Engagement	OGC	Oil & Gas Commission
CSA	Canadian Standards Association	OHS	Occupational Health and Safety
DFO	Department of Fisheries and Oceans	OSCAR	Oil Spill Containment and Recovery
EAZ	Emergency Awareness Zone	OSCP	On-Site Command Post
ECCC	Environment & Climate Change Canada	PAD	Protective Action Distance
EMBC	Emergency Management BC	PAZ	Protective Action Zone
EMO	Emergency Measures Organization	POC	Provincial Operations Centre
EOC	Emergency Operations Centre	PPB	Parts Per Billion
EPZ	Emergency Planning Zone	PPE	Personal Protective Equipment
ERAC	Emergency Response Assistance Canada	PPM	Parts Per Million
ERP	Emergency Response Plan	RCMP	Royal Canadian Mounted Police
ESD	Emergency Shut Down	RD	Rural District
ESDV	Emergency Shut-Down Valve	REOC	Regional Emergency Operations Centre
ETA	Estimated Time of Arrival	RHA	Regional Health Authority
FNIHB	First Nations and Inuit Health Branch – Health Canada	RM	Rural Municipality
GEOC	Government Emergency Operations Centre	SABA	Supplied Air Breathing Apparatus
HPZ	Hazard Planning Zone	SCBA	Self-Contained Breathing Apparatus
HVAC	Heating Ventilation Air Conditioning	SDS	Safety Data Sheet
HVP	High Vapour Pressure	SO ₂	Sulphur Dioxide
HVPL	High Vapour Pressure Liquid	STARS	Shock Trauma Air Rescue Society
H ₂ S	Hydrogen Sulphide	TDG	Transportation of Dangerous Goods
IAP	Incident Action Plan	WCSS	Western Canadian Spill Service
ICS	Incident Command System	WHMIS	Workplace Hazardous Materials Information System
IIZ	Initial Isolation Zone		
INAC	Indigenous and Northern Affairs Canada		
LA	Local Authority		
LBV	Line Block Valve		
LEL	Lower Explosive Limit		
LPG	Liquefied Petroleum Gas		
MARS	Mapping and Response System		



Appendix F: ERP Reference Material, continued Glossary of Terms

Adjacent to

Within 25 m.

Air Quality Monitoring

Measurement of atmospheric concentrations of a hazardous substance, such as H₂S or SO₂.

Auto-ignition temperature

All NGL products are flammable and will flash at extremely low temperatures. An open flame or spark is not necessary to cause ignition. Any hot surface which exceeds the auto-ignition temperature of a product can cause a fire if the vapours reaching the hot surface are within their flammable range.

Best practices

A technique or methodology that, through experience and research, has proven to reliably lead to a desired result. A commitment to using the best practices in any field is a commitment to using all the knowledge and technology at one's disposal to ensure success.

Body of water

Streams, lakes, and rivers.

Boiling Liquid Expanding Vapour Explosion (BLEVE)

Boiling Liquid Expanding Vapour Explosion, which is associated with natural gas liquids and high vapour pressure liquids.

Boiling point

This is the temperature that a liquid changes to a gas. NGL products change to a gas at extremely low temperatures and will absorb heat from the surrounding environment during the phase change. Therefore, caution must be used when working with NGLs because contact with flesh can reduce the temperature of the flesh to the NGL boiling point and cause severe frostbite.

British Columbia Oil and Gas Commission (OGC)

The OGC is the lead agency for all regulated oil and gas related activities within British Columbia.

British Columbia Emergency Management (EMBC)

Aids local governments in analyzing hazards and risks, develop and test emergency plans, train and organize emergency staff and volunteers. EMBC also manages all agencies in the event of an emergency or disaster, which cannot be handled locally.

Businesses

Industrial operators, retail outlet operators, suppliers, residents, outfitters, foresters and other entities that normally operate within the Emergency Planning Zone, but do not necessarily reside in the Emergency Planning Zone.



Appendix F: ERP Reference Material, continued

Glossary of Terms, continued

Closure order

When the OGC believes that, because of hazardous conditions in a field or at a well, it is necessary or expedient to close an area and to shut out all persons except those specifically authorized, the commission may make an order in writing setting out and delimiting the closed area. For Alberta see Fire Hazard (FH) Order.

Corporate Emergency Response Plan

This Emergency Response Plan is to facilitate a co-ordinated response by company executive and management personnel to an emergency situation, which may affect the company or its affiliated companies. The Corporate Emergency Response Plan is an integral part of all site-specific company Emergency Response Plans and procedures.

Critical Incident Stress Debriefing (CISD)

Critical Incident Stress Debriefing is a specially structured counselling process between the debriefers and those who are directly involved and/or impacted by an incident.

Emergency

A present or imminent event outside the scope of normal operations that requires prompt coordination of resources to protect the health, safety, and welfare of people and to limit damage to property and the environment.

Emergency Operations Centre (EOC)

An Emergency Operations Centre is a designated facility in a suitable location (i.e. head office, regional office, etc.) established by the permit holder to support Incident Command and to manage the larger aspects of an emergency. In a high-impact emergency, there may be a number of EOCs established to support the response. They may include the Incident Command Post, regional and corporate EOCs, a municipal EOC (MEOC), and the provincial government EOC (POC).

Emergency Awareness Zone (EAZ)

A distance outside of the EPZ where public protection measures may be required due to poor dispersion of the hazard. This area is twice the radius of the Emergency Planning Zone (EPZ).

Emergency Planning Zone (EPZ)

The geographical area that surrounds a well, pipeline or facility containing hazardous product that requires specific emergency response planning by the licensee.

Emergency Response Plan (ERP)

A comprehensive plan to protect the public that includes criteria for assessing an emergency situation and procedures for mobilizing response personnel and agencies and establishing communication and coordination among the parties.

Emergency Support Team (EST)

Provides advice and logistical support to the Field Response Team and Incident Commander in particular. The team is comprised of head office personnel and any contract emergency experts.

EOC Director

The EOC Director activates the Corporate Emergency Operations Centre with staff to provide advice and support to the Incident Commander (Field Response Team).



Appendix F: ERP Reference Material, continued

Glossary of Terms, continued

EOC Director, continued

Note: If the emergency happens outside an area that has a site specific Emergency Response Plan, only then will the EOC Director assume or appoint the role of Incident Commander and dispatch a Field Response Team to the incident site.

Evacuation

Organized, phased, and supervised withdrawal of members of the public from dangerous or potentially dangerous areas to safe areas.

Tactical Evacuation – A measure to immediately move people to a safe area as part of emergency response and operations. Does not require approval from local authority but the local authority may enact an evacuation order, if required, and local authority must be advised if a tactical evacuation has occurred.

Planned Evacuation – An evacuation coordinated by local government authority that can authorize evacuation alerts and orders.

Explosive Limits (Lower and Upper)

Each gaseous hydrocarbon substance has a minimum (Lower Explosive Limit or LEL) and a maximum (Upper Explosive Limit or UEL) percentage in air below or above which combustion will not take place. Explosive limit and flammability limit are used interchangeable. The terms "Too Lean" and "Too Rich" are used for levels outside of the explosive range.

Facility

Any building, structure, installation, equipment, or appurtenance that is connected to or associated with the recovery, development, production, handling, processing, treatment, or disposal of hydrocarbon-based resources or any associated substance or wastes. This does not include wells or pipelines.

Field Response Team (FRT)

Company and contractor personnel directly involved in controlling the incident at the emergency site and from the EOC.

Functional Exercise

As described in CAN/CSA Z246.2-18, an activity designed to evaluate capabilities and multiple functions using simulated response. A functional exercise will simulate the deployment of resources and rapid problem solving. Participants will evaluate management of the command and coordination centres and assess the adequacy of emergency response plans and resources.

Gathering system

The network of pipelines, pumps, tanks, and other equipment that carries oil and gas to a processing plant or to other separation equipment.

Hazard

A situation with potential to harm persons, property, or the environment.

Hazard Planning Zone (HPZ)

A geographical area (a) determined by using the hazard planning distance as a radius, and (b) within which persons, property or the environment may be affected by an emergency. Defined in Emergency Management Regulation.

Hazardous product

A substance released in quantities that may harm persons, property, or the environment.



Appendix F: ERP Reference Material, continued

Glossary of Terms, continued

High Vapour Pressure Liquids (HVPLs)

HVPLs have a vapour pressure greater than 240 kPa at 38°C (34.8 PSIG @ 100°F) and include ethane, propane, butane, and pentanes plus, either as a mixture or as a single component.

Note: Comparisons

Gasoline - Vapour pressure between 55 and 100 kPa at 38°C (8 - 14.5 PSIG @ 100°F).

Condensate - Often a component of a propane/butane mixture, has a vapour pressure of 59 to 72 kPa at 38°C (8.6 - 10.4 PSIG @ 100°F).

High Vapour Pressure (HVP) plume dispersion geometry

An uncontrolled release of NGL product on flat terrain will form a vapour plume as it disperses. If the vapour plume formed at the leak site has not been ignited, it will most likely reach its maximum size within the first half hour of the leak occurrence. Two unique features of an NGL plume are:

The downwind edge of the plume tends to spread out significantly forming a broad frontal edge.

Under certain conditions, the plume will travel upwind for a short distance.

High Vapour Pressure (HVP) pipeline

A pipeline system conveying hydrocarbons or hydrocarbon mixtures in the liquid or quasi-liquid state with a vapour pressure greater than 110 kilopascals absolute at 38°C. Some examples are liquid ethane, ethylene, propane, butanes, and pentanes plus.

High Vapour Pressure (HVP) products

HVP products have a vapour pressure greater than 240 kPa at 38°C (34.8 PSIG at 100°F) and include ethane, propane, butane and pentanes plus, either as a mixture or as a single component. A leak from a vessel or pipe containing HVP products can result in a BLEVE.

Hydrogen sulphide (H₂S)

A naturally occurring gas found in a variety of geological formations and also formed by the natural decomposition of organic matter in the absence of oxygen. H₂S is colourless, has a molecular weight that is heavier than air, and is extremely toxic. In small concentrations, it has a rotten egg smell and causes eye and throat irritations. Depending on the particular gaseous mixture, gas properties, and ambient conditions, a sour gas release may be:

Heavier than air (dense), so it will tend to drop towards the ground with time,

Lighter than air (buoyant), so it will tend to rise with time, or

About the same weight as air (neutrally buoyant), so it will tend to neither rise nor drop but with time disperse.

Hydrogen sulphide (H₂S) release rate

The rate that sour gas escapes into the atmosphere is often calculated for sour gas wells. It is usually defined in cubic metres per second (m^3/s). The size of the emergency planning zone is estimated from the H₂S release rate.

Hydrogen sulphide (H₂S) release volume

The volume of sour gas that escapes into the atmosphere is often calculated for facilities that have a defined retention volume, usually defined in cubic metres. Emergency planning zone sizes are often estimated using the volume of H₂S that may be released from a facility. More sophisticated models may also incorporate the rate at which the release could occur and the nature of the gas and the atmospheric conditions when determining the emergency planning zone size.



Appendix F: ERP Reference Material, continued

Glossary of Terms, continued

Hyper-susceptible

A person or persons who may be abnormally reactive to a given exposure to toxins and whose reaction may occur in orders of magnitude greater than that of the susceptible population. Hypersusceptibles include those persons with impaired respiratory function, heart disease, liver disease, neurological disorders, eye disorders, severe anemia, and suppressed immunological function.

Ignition

Process of setting a hydrocarbon release on fire.

Ignition Team

Consists of at least two personnel trained in plume ignition.

Incident

An unexpected occurrence or event that requires action by emergency personnel to prevent or minimize the impacts on people, property, and the environment.

Incident classification

A system that examines the risk level to members of the public following an incident and assigns a level of emergency based on the consequence of the incident and the likelihood of the incident escalating.

Incident Command Post (ICP)

A designated place where the Incident Commander and staff is located. The ICP should be located outside of the hazard area, but close to the incident. The ICP may be a vehicle, trailer, fixed facility or any location suitable to accommodate the function.

Incident Commander

Manages the overall response to emergency incidents. The Incident Commander is responsible for: developing objectives, strategies and tactics that guide the response; assigning personnel to fill necessary positions; ensuring the safety of all personnel; keeping internal and external stakeholders updated; coordinating with other response agencies.

Incident Command System (ICS)

A standardized, on-scene, all-hazard incident management system. The Incident Command System (ICS) is flexible in that it can be adapted for large and small incidents.

Incident Management System

A system used to coordinate preparedness and incident management.

Isolating the release

Ensuring access to the hazard area is controlled.

Level 1 Emergency

There is no immediate danger to the public or environment as no H₂S has been released; the emergency is confined to the lease or company property.

Level 2 Emergency

There is potential risk to the public or environment, as the emergency could extend beyond company property. However, control is still possible.



Appendix F: ERP Reference Material, continued

Glossary of Terms, continued

Level 3 Emergency

An immediate danger to the public or environment exists; control of the situation has been lost.

Licensee

The responsible duty holder as specified in legislation.

Liquid to gas expansion

NGL products will expand greatly when released to the atmosphere. For example, propane expands 272 times its liquid volume. Other products expand at different rates, but all have a high gas to liquid ratio.

Liquefied Petroleum Gas (LPG)

Mixture of heavier, gaseous hydrocarbons (butane and propane), liquefied as a portable source of energy.

Local Authority

A local authority is considered to be:

- 1) The council of a city, town, village or municipal district;
- 2) in the case of an improvement district or special area, the Minister of Municipal Affairs;
- 3) for a national park, the park superintendent or the par superintendent's delegate;
- 4) the settlement council of a Métis settlement; or
- 5) the band council of a First Nations Reserve.

Local State of Emergency

See State of local emergency.

Lower Explosive Limit (LEL)

The lowest concentration of gas or vapour (per cent by volume in air) that explodes if an ignition source is present at ambient temperatures.

Major (full-blown) exercise

As described in CAN/CSA Z246.2-18, a multi-agency, multi-jurisdictional activity involving actual deployment of resources in a coordinated response, as if a real emergency had occurred. The full-scale exercise includes the mobilization of units, personnel, and equipment. Participants will assess plans and procedures and evaluate coordinated responses under crisis conditions.

Maximum Operating Pressure (MOP)

The maximum licensed operating pressure for a vessel or pipeline or a section of it.

Ministry of Energy and Resources (MER)

MER is the lead regulatory agency for the upstream petroleum industry in Saskatchewan.

Minor Emergency

There are no consequential impacts to public or environment.

Mobile air quality monitoring

Use of sophisticated portable equipment to track substances such as H₂S or SO₂ at very low parts per billion atmospheric concentrations.

Municipality

See local authority.



Appendix F: ERP Reference Material, continued

Glossary of Terms, continued

Municipal Emergency Operations Centre (MEOC)

The centre from which responsible municipal officials manage and support emergency operations within their jurisdiction, as well as formulate protective actions and provide public information. The centre has adequate workspace, maps, status boards, and communications capability.

Municipal Emergency Plan (MEP)

The emergency plan of the local authority.

Natural Gas Liquids (NGL)

These are hydrocarbons liquefied under pressure in field facilities or in gas processing plants. Natural gas liquids include ethane, propane, butane and pentanes plus and normally occur as a mixture of these compounds.

Physical Properties of NGL Products:

Colour - NGL products are colourless except when they include a condensate component, which gives them a light-yellow appearance. Releases during winter conditions can discolour snow. NGL products may appear as a white cloud when released to the atmosphere. This white cloud is formed by the condensing of moisture in the air.

Odour - Most NGL products have a mild petroleum odour. During pipeline transport NGL products are almost odourless.

Vapour Density - A measure of the mass per unit volume of the vapour (i.e. kg/m3). All NGL products transported by the company have a vapour density greater than air or a relative vapour density greater than 1.0.

NAV Canada

Canada's civil air navigation services provider, with operations coast to coast. NAV Canada provides air traffic control, flight information, weather briefings, aeronautical information services, airport advisory services, and electronic aids to navigation.

Notice to Airmen (NOTAM)

An order issued by Transport Canada restricting access to airspace in a defined area.

Notification

The distribution of project-specific information to participants that may be directly and adversely affected by the proposed energy development.

Odour complaint

A report that someone smells an offensive odour (may be sour gas) in the area.

Oil Spill Containment and Recovery Unit (OSCAR)

Trailer containing oil spill equipment for containment and recovery.

On-site command post (OSCP)

An emergency operations centre established in the immediate vicinity of the incident to provide immediate and direct response to the emergency and initially staffed by licensee personnel.

Partially controlled flow

A restricted flow of product at surface that cannot be shut off at the licensee's discretion with equipment onsite.

Personal consultation

Consultation through face-to-face visits or telephone conversations with all requisite individuals.



Appendix F: ERP Reference Material, continued

Glossary of Terms, continued

Petroleum industry

Refers to all petroleum industry operations.

Plume (gas plume)

An elongated mobile column of gas or smoke.

Protective Action Distance (PAD)

The distance from the incident to the EPZ outer boundary.

Provincial Operations Centre (POC)

An operations centre with the capacity to accommodate representatives from each government department.

Public

The group of people who may be or are impacted by an emergency (e.g., employees, contractors, neighbours, emergency response organizations, regulatory agencies, the media, appointed or elected officials, visitors, customers, etc., as appropriate).

Public protection measures

The use of sheltering, evacuation, ignition, and isolation procedures to mitigate the impact of a hazardous release on members of the public.

Public Safety Group Supervisor

Member of the field response team. Individual charged with the responsibility of co-ordinating the evacuation or shelter of people in the emergency hazard Area. The Public Safety Group Supervisor reports to and may be located in the same location as the Incident Commander.

Publicly used facility

Places where the presence of people can be anticipated. Examples include places of business, cottages, campgrounds, churches, and other locations created for use by the public. Includes any similar development the OGC may designate as a public facility.

Publicly used facility

Places where the presence of people can be anticipated. Examples include places of business, cottages, campground, churches, and other locations created for use by the public.

Reception centre

A centre established to register evacuees for emergency shelter, to assess their needs, and, if temporary shelter is not required because evacuees will stay elsewhere, to ascertain where they can be contacted.

Regional Emergency Operations Centre (REOC)

An operations centre established in a suitable location to manage the larger aspects of the emergency that is manned jointly by government and industry staff.

Residence

A dwelling that is occupied full time or part time.

Resident

Individual living in the area at a fixed location.

Resident data record

Form used to track the contact made with residents, businesses and transients.



Appendix F: ERP Reference Material, continued

Glossary of Terms, continued

Roadblock Crew

Personnel responsible for controlling access to the Emergency Hazard Area, reporting to the Public Safety Group Supervisor.

Rover

Member of the field response team. Individual responsible for assisting in the evacuation of the Hazard Area, reporting to the Public Safety Group Supervisor. May also be directed to shut-in / shut down equipment that may cause future safety hazards.

Rover Kit

A briefcase containing maps, forms, supplies and instructions needed by the Rover to carry out their duties.

S.A.B.A.

Supplied Air Breathing Apparatus.

S.C.B.A.

Self Contained Breathing Apparatus.

Serious injury

A serious injury includes the following:

- an injury that results in death;
- fracture of a major bone;
- amputation other than a portion of a finger or toe;
- loss of sight in an eye;
- internal haemorrhage;
- third degree burns;
- unconsciousness;
- An injury that results in paralysis (permanent loss of function).

Shelter-in-Place

Remaining indoors for short-term protection from exposure to toxic gas releases.

Sour gas

Natural gas, including solution gas, containing hydrogen sulphide (H₂S).

Sour gas release

An uncontrolled release of natural gas containing hydrogen sulphide (H₂S).

Sour multiphase product

Any liquid that contains H₂S in the gas phase.

Sour multiphase pipeline

A pipeline that transmits a multiphase product that contains more than 10 moles of H₂S per kilomole of natural gas in the gas phase.

Sour pipeline

Pipeline that conveys gas and/or liquid that contains sour gas.

Sour production facility

Facility that processes gas and/or liquid that contains sour gas



Appendix F: ERP Reference Material, continued

Glossary of Terms, continued

Sour well

An oil or gas well expected to encounter during drilling formations bearing sour gas or any oil or gas well capable of producing sour gas.

Special needs

Those persons for whom early response actions must be taken because they require evacuation assistance, requested early notification, do not have telephones, require transportation assistance, have a language or comprehension barrier, or have specific medical needs. Special needs also include those who decline to give information during the public consultation process and any residences or businesses where contact cannot be made.

Special sour well

A designation that reflects the proposed well's proximity to populated centers and its maximum potential H₂S release rate during the drilling state. The casing or open-hole flow configuration is used in arriving at this designation.

Standing well

A well that has been drilled and cased but not perforated. A company is generally allowed to leave the well as standing for up to one year.

State of local emergency

A declaration by a local authority providing the necessary authority, resources, and procedures at the municipal level to allow an emergency to be resolved effectively and efficiently.

Sulphur dioxide (SO₂)

A colourless, water-soluble, suffocating gas formed by burning sulphur in air; also used in the manufacture of sulphuric acid. SO_2 has a pungent smell similar to a burning match. SO_2 is extremely toxic at higher concentrations. The molecular weight of SO_2 is heavier than air; however, typical releases are related to combustion, which makes the gaseous mixture lighter than air (buoyant).

Surface development

Dwellings that are occupied full-time or part-time, publicly used development, public facilities, including campgrounds and places of business, and any other surface development where the public may gather on a regular basis. Surface development includes residences immediately adjacent to the EPZ and those from which dwellers are required to egress through the EPZ.

Susceptible

The subpopulation of persons who may be considered more sensitive to the effects of H₂S and SO₂, including the elderly, pregnant women, and the very young, particularly preschool-aged children.

Tabletop exercise

As described in CAN/ CSA Z246.2-18, an informal exercise generally used to review resource allocations and roles and responsibilities of personnel and to familiarize new personnel with emergency operations without the stress and time constraints of a major exercise.

Technically complete Emergency Response Plan (ERP)

A plan that meets all applicable requirements.

Telephoners

Telephoners place calls to residents as directed by the Public Safety Group Supervisor.



Appendix F: ERP Reference Material, continued

Glossary of Terms, continued

Threatening telephone call

Any communication that threatens the well-being of company personnel or property. A form is provided in the manual to capture data from or about a person who calls with a threatening message.

Transient

An individual that is temporarily in the area (e.g. camper, cross-country skier).

Trapper

The holder of a provincial licensed and registered trapline for the purpose of hunting and trapping fur bearing animals.

Uncontrolled flow

A release of product that cannot be shut off at the licensee's discretion.

Urban centre

A city, town, village, summer village, or hamlet with no fewer than 50 separate buildings, each of which must be an occupied dwelling, or any similar development.

Unrestricted country development

Any collection of permanent dwellings situated outside of an urban centre and having more than eight permanent dwellings per quarter section.

Urban density development

Any incorporated urban centre, unincorporated rural subdivision, or group of subdivisions with no fewer than 50 separate buildings, each of which must be an occupied dwelling.

Vapour pressure

The pressure exerted by the vapour when the rate of evaporation is equal to the rate of condensation of the vapour. All NGL products have vapour pressure greater than atmospheric pressure air and therefore have to be kept under pressure or else they will vaporize.

Vapour-air plume / vapour cloud

When released to atmosphere, products form a vapour-air plume that is colourless, heavier than air and has a faint gasoline odour. Depending on the product released and the atmospheric conditions, water vapour may condense to form a cloud.

Water body

Natural or manmade; contains or conveys water continuously, intermittently, or seasonally. A natural water body is any location where water flows or is present, whether the flow or the presence of water is continuous, seasonal, intermittent, or occurs only during a flood. This includes, but is not limited to, the bed and shore of a river, stream, lake, creek, lagoon, swamp, marsh, slough, muskeg, or other natural drainage, such as ephemeral draws, wetlands, riparian areas, floodplains, fens, bogs, coulees, and rills. Examples of a manmade water body include, but are not limited to, a canal, drainage ditch, reservoir, dugout or other manmade surface feature.

Well servicing

The maintenance procedures performed on a producing or injecting well after the well has been completed and operations have commenced. Well servicing activities are generally conducted to maintain or enhance well productivity or injectivity.

Workover

The process of re-entering an existing well to perform remedial action that will restore or improve the productivity or injectivity of the target formation.